

**Table S3. Similarity of *Arcobacter butzleri* proteins to proteins from other taxa.**

Locus	#	Gene	ID	Taxon	E-value	Identity
AB0001	1	<i>dnaA</i>	gi 152991598 ref YP_001357319.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-136	Identity = 60.24%
	2		gi 152989754 ref YP_001355476.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-132	Identity = 57.93%
	3		gi 34556459 ref NP_906274.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-132	Identity = 57.38%
	4		gi 154174998 ref YP_001407305.1	Campylobacter curvus 525.92	E-value = 2.00E-117	Identity = 52.76%
	5		gi 118474813 ref YP_891211.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-113	Identity = 52.18%
AB0002	1	<i>dnaN</i>	gi 34556460 ref NP_906275.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-86	Identity = 50.99%
	2		gi 152989755 ref YP_001355477.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-81	Identity = 52.39%
	3		gi 152991599 ref YP_001357320.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-81	Identity = 48.31%
	4		gi 78776203 ref YP_392518.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-80	Identity = 51.27%
	5		gi 32266625 ref NP_860657.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-76	Identity = 47.89%
AB0003	1	<i>gyrB</i>	gi 34556461 ref NP_906276.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 69.99%
	2		gi 152991737 ref YP_001357458.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 69.38%
	3		gi 152989756 ref YP_001355478.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 71.35%
	4		gi 78776204 ref YP_392519.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 69.78%
	5		gi 157165358 ref YP_001465928.1	Campylobacter concisus 13826	E-value = 0	Identity = 69.65%
AB0004	1		gi 152991475 ref YP_001357197.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-83	Identity = 53.75%
	2		gi 157164867 ref YP_001466727.1	Campylobacter concisus 13826	E-value = 1.00E-79	Identity = 48.73%
	3		gi 32266652 ref NP_860684.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-77	Identity = 48.62%
	4		gi 34556762 ref NP_906577.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-77	Identity = 50.47%
	5		gi 118474851 ref YP_891811.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-77	Identity = 50.95%
AB0005	1	<i>queF</i>	gi 152991735 ref YP_001357456.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-47	Identity = 79.51%
	2		gi 149194735 ref ZP_01871830.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-42	Identity = 72.22%
	3		gi 78776205 ref YP_392520.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-39	Identity = 62.40%
	4		gi 152989758 ref YP_001355480.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-39	Identity = 63.20%
	5		gi 57241678 ref ZP_00369623.1	Campylobacter lari RM2100	E-value = 3.00E-38	Identity = 64.75%
AB0006	1		<b>*** No matches found ***</b>			
AB0007	1		gi 39995462 ref NP_951413.1	Geobacter sulfurreducens PCA	E-value = 1.00E-22	Identity = 43.94%
	2		gi 114776874 ref ZP_01451917.1	Mariprofundus ferrooxydans PV-1	E-value = 5.00E-22	Identity = 46.09%
	3		gi 118578932 ref YP_900182.1	Pelobacter propionicus DSM 2379	E-value = 4.00E-21	Identity = 41.73%
	4		gi 88861218 ref ZP_01135851.1	Pseudoalteromonas tunicata D2	E-value = 1.00E-20	Identity = 44.19%
	5		gi 119469676 ref ZP_01612545.1	Alteromonadales bacterium TW-7	E-value = 3.00E-20	Identity = 43.61%
AB0008	1		gi 154174057 ref YP_001409001.1	Campylobacter curvus 525.92	E-value = 3.00E-52	Identity = 39.46%
	2		gi 34557400 ref NP_907215.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-52	Identity = 40.84%
	3		gi 118475227 ref YP_891483.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-48	Identity = 44.06%
	4		gi 78777747 ref YP_394062.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-48	Identity = 39.30%
	5		gi 34557502 ref NP_907317.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-48	Identity = 39.25%
AB0009	1	<i>modD</i>	gi 152993679 ref YP_001359400.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-101	Identity = 66.90%
	2		gi 149194352 ref ZP_01871449.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-78	Identity = 56.58%
	3		gi 154173712 ref YP_001408984.1	Campylobacter curvus 525.92	E-value = 3.00E-75	Identity = 52.30%
	4		gi 157164060 ref YP_001467610.1	Campylobacter concisus 13826	E-value = 1.00E-67	Identity = 48.23%
	5		gi 68551926 ref ZP_00591319.1	Prosthecochloris aestuarii DSM 271	E-value = 4.00E-67	Identity = 46.71%
AB0010	1	<i>modB</i>	gi 152993680 ref YP_001359401.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-85	Identity = 73.01%
	2		gi 67938704 ref ZP_00531225.1	Chlorobium phaeobacteroides BS1	E-value = 1.00E-65	Identity = 58.90%
	3		gi 149194351 ref ZP_01871448.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-65	Identity = 64.71%
	4		gi 154148639 ref YP_001405915.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-63	Identity = 61.16%

	5	gi 68551925 ref ZP_00591318.1	Prosthecochloris aestuarii DSM 271	E-value = 2.00E-61	Identity = 57.47%
AB0011	1	gi 152993681 ref YP_001359402.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-20	Identity = 45.04%
	2	gi 68550335 ref ZP_00589786.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 1.00E-12	Identity = 36.84%
	3	gi 119356277 ref YP_910921.1	Chlorobium phaeobacteroides DSM 266	E-value = 7.00E-12	Identity = 37.50%
	4	gi 67918868 ref ZP_00512460.1	Chlorobium limicola DSM 245	E-value = 6.00E-11	Identity = 34.38%
	5	gi 67938703 ref ZP_00531224.1	Chlorobium phaeobacteroides BS1	E-value = 4.00E-10	Identity = 31.01%
AB0012	1	gi 154175064 ref YP_001408986.1	Campylobacter curvus 525.92	E-value = 4.00E-67	Identity = 57.81%
	2	gi 157164768 ref YP_001467608.1	Campylobacter concisus 13826	E-value = 3.00E-59	Identity = 50.85%
	3	gi 154149022 ref YP_001405919.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-56	Identity = 49.34%
	4	gi 118474610 ref YP_891564.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-56	Identity = 50.87%
	5	gi 57241524 ref ZP_00369470.1	Campylobacter lari RM2100	E-value = 6.00E-55	Identity = 50.61%
AB0013	1	gi 152993683 ref YP_001359404.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-54	Identity = 51.15%
	2	gi 67158371 ref ZP_00419362.1	Azotobacter vinelandii AvOP	E-value = 1.00E-44	Identity = 38.71%
	3	gi 152995007 ref YP_001339842.1	Marinomonas sp. MWYL1	E-value = 2.00E-43	Identity = 43.33%
	4	gi 94309512 ref YP_582722.1	Ralstonia metallidurans CH34	E-value = 2.00E-43	Identity = 42.68%
	5	gi 152981988 ref YP_001355349.1	Janthinobacterium sp. Marseille	E-value = 3.00E-42	Identity = 40.34%
AB0014	1	gi 152992875 ref YP_001358596.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-105	Identity = 52.88%
	2	gi 152990675 ref YP_001356397.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-86	Identity = 52.72%
	3	gi 149194629 ref ZP_01871725.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-67	Identity = 52.70%
	4	gi 34540274 ref NP_904753.1	Porphyromonas gingivalis W83	E-value = 3.00E-48	Identity = 35.63%
	5	gi 153809231 ref ZP_01961899.1	Bacteroides caccae ATCC 43185	E-value = 1.00E-47	Identity = 33.25%
AB0015	1	gi 30263453 ref NP_845830.1	Bacillus anthracis str. Ames	E-value = 2.00E-35	Identity = 35.82%
	2	gi 89206591 ref ZP_01185147.1	Bacillus weihenstephanensis KBAB4	E-value = 3.00E-35	Identity = 35.45%
	3	gi 47564625 ref ZP_00235670.1	Bacillus cereus G9241	E-value = 5.00E-35	Identity = 35.07%
	4	gi 52142032 ref YP_084797.1	Bacillus cereus E33L	E-value = 6.00E-35	Identity = 35.45%
	5	gi 118478757 ref YP_895908.1	Bacillus thuringiensis str. Al Hakam	E-value = 8.00E-35	Identity = 35.82%
AB0016	1	gi 119946284 ref YP_943964.1	Psychromonas ingrahamii 37	E-value = 5.00E-126	Identity = 67.53%
	2	gi 71280563 ref YP_271535.1	Colwellia psychrerythraea 34H	E-value = 8.00E-119	Identity = 62.44%
	3	gi 88799378 ref ZP_01114956.1	Reinekea sp. MED297	E-value = 3.00E-109	Identity = 57.96%
	4	gi 89899664 ref YP_522135.1	Rhodoferrax ferrireducens T118	E-value = 3.00E-56	Identity = 35.70%
	5	gi 114562761 ref YP_750274.1	Shewanella frigidimarina NCIMB 400	E-value = 4.00E-54	Identity = 33.60%
AB0017	1		*** No matches found ***		
AB0018	1	gi 152989807 ref YP_001355529.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-55	Identity = 42.33%
	2	gi 78778288 ref YP_394603.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-54	Identity = 43.42%
	3	gi 149194782 ref ZP_01871877.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-53	Identity = 42.76%
	4	gi 157163990 ref YP_001467817.1	Campylobacter concisus 13826	E-value = 1.00E-51	Identity = 40.79%
	5	gi 154148734 ref YP_001407253.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-50	Identity = 41.30%
AB0019	1	gi 78778289 ref YP_394604.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 84.39%
	2	gi 152993943 ref YP_001359664.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 86.17%
	3	gi 34556845 ref NP_906660.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 78.91%
	4	gi 149194784 ref ZP_01871879.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 78%
	5	gi 32266852 ref NP_860884.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 74.83%
AB0020	1	gi 152989805 ref YP_001355527.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 72.54%
	2	gi 78778290 ref YP_394605.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 70.62%
	3	gi 157165034 ref YP_001467815.1	Campylobacter concisus 13826	E-value = 0	Identity = 71.5%
	4	gi 152993944 ref YP_001359665.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 70.28%
	5	gi 154174561 ref YP_001407352.1	Campylobacter curvus 525.92	E-value = 0	Identity = 69.44%
AB0021	1	gi 157164305 ref YP_001467763.1	Campylobacter concisus 13826	E-value = 6.00E-134	Identity = 70.59%
	2	gi 118474076 ref YP_891239.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-133	Identity = 70.29%

	3	gi 154174558 ref YP_001409201.1	Campylobacter curvus 525.92	E-value = 8.00E-133	Identity = 70.00%
	4	gi 57505748 ref ZP_00371674.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-132	Identity = 69.12%
	5	gi 15791603 ref NP_281426.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-131	Identity = 69.12%
AB0022	1	gi 153215749 ref ZP_01950118.1	Vibrio cholerae 1587	E-value = 2.00E-20	Identity = 31.27%
	2	gi 153216893 ref ZP_01950657.1	Vibrio cholerae 1587	E-value = 1.00E-12	Identity = 27.47%
	3	gi 104782694 ref YP_609192.1	Pseudomonas entomophila L48	E-value = 6.00E-11	Identity = 25.00%
AB0023	1	gi 56420405 ref YP_147723.1	Geobacillus kaustophilus HTA426	E-value = 9.00E-30	Identity = 42.64%
	2	gi 77359159 ref YP_338734.1	Pseudoalteromonas haloplanktis TAC125	E-value = 1.00E-29	Identity = 46.88%
	3	gi 149374593 ref ZP_01892367.1	Marinobacter algicola DG893	E-value = 2.00E-29	Identity = 46.72%
	4	gi 138895409 ref YP_001125862.1	Geobacillus thermodenitrificans NG80-2	E-value = 3.00E-29	Identity = 41.86%
	5	gi 134105196 pdb 2OIW A	Geobacillus stearothermophilus	E-value = 6.00E-28	Identity = 41.41%
AB0024	1		*** No matches found ***		
AB0025	1		*** No matches found ***		
AB0026	1	gi 84684106 ref ZP_01012008.1	Rhodobacteriales bacterium HTCC2654	E-value = 3.00E-13	Identity = 26.15%
AB0027	1	gi 93006608 ref YP_581045.1	Psychrobacter cryohalolentis K5	E-value = 1.00E-125	Identity = 68.10%
	2	gi 95929023 ref ZP_01311768.1	Desulfuromonas acetoxidans DSM 684	E-value = 4.00E-92	Identity = 53.38%
	3	gi 119490232 ref ZP_01622745.1	Lyngbya sp. PCC 8106	E-value = 8.00E-92	Identity = 50.77%
	4	gi 88796036 ref ZP_01111721.1	Alteromonas macleodii 'Deep ecotype'	E-value = 3.00E-91	Identity = 50.00%
	5	gi 118580629 ref YP_901879.1	Pelobacter propionicus DSM 2379	E-value = 5.00E-89	Identity = 48.62%
AB0028	1	gi 1881336 dbj BAA19363.1	Bacillus subtilis	E-value = 1.00E-28	Identity = 52.38%
	2	gi 16077596 ref NP_388410.1	Bacillus subtilis subsp. subtilis str. 168	E-value = 1.00E-27	Identity = 54.95%
	3	gi 113940897 ref ZP_01426715.1	Herpetosiphon aurantiacus ATCC 23779	E-value = 4.00E-27	Identity = 49.51%
	4	gi 23128560 ref ZP_00110403.1	Nostoc punctiforme PCC 73102	E-value = 9.00E-26	Identity = 55.88%
	5	gi 68056146 ref ZP_00540278.1	Exiguobacterium sibiricum 255-15	E-value = 3.00E-25	Identity = 54.90%
AB0029	1	gi 118474527 ref YP_891950.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-102	Identity = 65.41%
	2	gi 78777528 ref YP_393843.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-102	Identity = 64.07%
	3	gi 57168075 ref ZP_00367214.1	Campylobacter coli RM2228	E-value = 1.00E-98	Identity = 62.24%
	4	gi 154148876 ref YP_001406504.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-98	Identity = 64.38%
	5	gi 86150853 ref ZP_01069069.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-98	Identity = 63.01%
AB0030	1	gi 152990603 ref YP_001356325.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 72.36%
	2	gi 34558292 ref NP_908107.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 70.19%
	3	gi 78777531 ref YP_393846.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 69.98%
	4	gi 32266295 ref NP_860327.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 68.57%
	5	gi 154174942 ref YP_001408363.1	Campylobacter curvus 525.92	E-value = 0	Identity = 68.84%
AB0031	1	gi 34556608 ref NP_906423.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-36	Identity = 31.16%
	2	gi 152991383 ref YP_001357105.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-34	Identity = 32.49%
	3	gi 57241512 ref ZP_00369458.1	Campylobacter lari RM2100	E-value = 1.00E-33	Identity = 30.18%
	4	gi 149194720 ref ZP_01871815.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-29	Identity = 33.21%
	5	gi 118474339 ref YP_892696.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-29	Identity = 29.84%
AB0032	1	gi 78358643 ref YP_390092.1	Desulfovibrio desulfuricans G20	E-value = 0	Identity = 53.79%
	2	gi 120603763 ref YP_968163.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 0	Identity = 50.9%
	3	gi 46578669 ref YP_009477.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 0	Identity = 50.79%
	4	gi 152994114 ref YP_001338949.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 50.37%
	5	gi 119945154 ref YP_942834.1	Psychromonas ingrahamii 37	E-value = 0	Identity = 50.16%
AB0033	1	gi 126359878 ref ZP_01716869.1	Pseudomonas putida GB-1	E-value = 0	Identity = 68.23%
	2	gi 104780003 ref YP_606501.1	Pseudomonas entomophila L48	E-value = 0	Identity = 68.23%
	3	gi 26991418 ref NP_746843.1	Pseudomonas putida KT2440	E-value = 0	Identity = 68.05%
	4	gi 119859830 ref ZP_01641240.1	Pseudomonas putida W619	E-value = 0	Identity = 68.59%
	5	gi 67158701 ref ZP_00419562.1	Azotobacter vinelandii AvOP	E-value = 0	Identity = 67.08%

AB0034	1	gi 34557072 ref NP_906887.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-41	Identity = 41.63%
	2	gi 34556569 ref NP_906384.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-33	Identity = 43.54%
	3	gi 152990276 ref YP_001355998.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-28	Identity = 35.24%
	4	gi 78777655 ref YP_393970.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-28	Identity = 36.45%
	5	gi 152992275 ref YP_001357996.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-28	Identity = 35.48%
AB0035	1	gi 34557073 ref NP_906888.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-103	Identity = 32.50%
	2	gi 51244877 ref YP_064761.1	Desulfotalea psychrophila LSV54	E-value = 3.00E-66	Identity = 26.29%
	3	gi 118746174 ref ZP_01594125.1	Geobacter lovleyi SZ	E-value = 3.00E-49	Identity = 25.83%
AB0036	1	gi 150005398 ref YP_001300142.1	Bacteroides vulgatus ATCC 8482	E-value = 3.00E-37	Identity = 43.88%
	2	gi 149174457 ref ZP_01853083.1	Planctomyces maris DSM 8797	E-value = 5.00E-37	Identity = 41.79%
	3	gi 87311926 ref ZP_01094037.1	Blastopirellula marina DSM 3645	E-value = 8.00E-37	Identity = 41.79%
	4	gi 156107658 gb EDO09403.1	Bacteroides ovatus ATCC 8483	E-value = 2.00E-36	Identity = 42.78%
	5	gi 53714877 ref YP_100869.1	Bacteroides fragilis YCH46	E-value = 3.00E-36	Identity = 43.52%
AB0037	1	gi 87311927 ref ZP_01094038.1	Blastopirellula marina DSM 3645	E-value = 6.00E-177	Identity = 63.31%
	2	gi 149174456 ref ZP_01853082.1	Planctomyces maris DSM 8797	E-value = 1.00E-172	Identity = 62.47%
	3	gi 32474928 ref NP_867922.1	Rhodopirellula baltica SH 1	E-value = 7.00E-164	Identity = 60.94%
	4	gi 86159398 ref YP_466183.1	Anaeromyxobacter dehalogenans 2CP-C	E-value = 2.00E-163	Identity = 61.30%
	5	gi 153004302 ref YP_001378627.1	Anaeromyxobacter sp. Fw109-5	E-value = 2.00E-158	Identity = 59.72%
AB0038	1	gi 154492498 ref ZP_02032124.1	Parabacteroides merdae ATCC 43184	E-value = 8.00E-76	Identity = 54.69%
	2	gi 149174455 ref ZP_01853081.1	Planctomyces maris DSM 8797	E-value = 2.00E-75	Identity = 51.85%
	3	gi 150005396 ref YP_001300140.1	Bacteroides vulgatus ATCC 8482	E-value = 4.00E-75	Identity = 55.28%
	4	gi 53714879 ref YP_100871.1	Bacteroides fragilis YCH46	E-value = 2.00E-73	Identity = 53.06%
	5	gi 29349863 ref NP_813366.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 2.00E-73	Identity = 52.24%
AB0039	1	gi 78776348 ref YP_392663.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-59	Identity = 81.82%
	2	gi 157311519 ref YP_001469562.1	Enterobacteria phage Phi1	E-value = 4.00E-28	Identity = 44.08%
	3	gi 33620697 ref NP_891789.1	Enterobacteria phage RB49	E-value = 4.00E-28	Identity = 43.42%
	4	gi 109290173 ref YP_656422.1	Aeromonas phage 25	E-value = 1.00E-27	Identity = 48.20%
	5	gi 34419354 ref NP_899367.1	Vibrio phage KVP40	E-value = 1.00E-26	Identity = 47.83%
AB0040	1	accB gi 152991386 ref YP_001357108.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-38	Identity = 54.78%
	2	gi 34557455 ref NP_907270.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-30	Identity = 49.04%
	3	gi 149194766 ref ZP_01871861.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-30	Identity = 45.86%
	4	gi 57168201 ref ZP_00367340.1	Campylobacter coli RM2228	E-value = 2.00E-28	Identity = 46.20%
	5	gi 32265693 ref NP_859725.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-27	Identity = 46.54%
AB0041	1	accC1 gi 34557456 ref NP_907271.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-179	Identity = 68.64%
	2	gi 157164344 ref YP_001467578.1	Campylobacter concisus 13826	E-value = 1.00E-176	Identity = 68.55%
	3	gi 152991385 ref YP_001357107.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-176	Identity = 69.00%
	4	gi 57241511 ref ZP_00369457.1	Campylobacter lari RM2100	E-value = 1.00E-175	Identity = 68.33%
	5	gi 149194767 ref ZP_01871862.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-175	Identity = 66.59%
AB0042	1	gi 152991450 ref YP_001357172.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-162	Identity = 61.62%
	2	gi 152992584 ref YP_001358305.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-154	Identity = 58.08%
	3	gi 149194827 ref ZP_01871921.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-149	Identity = 63.78%
	4	gi 78777961 ref YP_394276.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-137	Identity = 50.57%
	5	gi 34557821 ref NP_907636.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-131	Identity = 49.60%
AB0044	1	gi 152992712 ref YP_001358433.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-151	Identity = 59.05%
	2	gi 78484888 ref YP_390813.1	Thiomicrospira crunogena XCL-2	E-value = 6.00E-142	Identity = 53.11%
	3	gi 118737207 ref ZP_01585611.1	Dinoroseobacter shibae DFL 12	E-value = 6.00E-136	Identity = 54.79%
	4	gi 89093329 ref ZP_01166278.1	Oceanospirillum sp. MED92	E-value = 2.00E-134	Identity = 52.31%
	5	gi 152990317 ref YP_001356039.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-134	Identity = 54.21%
AB0045	1	gi 152991060 ref YP_001356782.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-40	Identity = 44.21%

	2	gi 78776542 ref YP_392857.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-35	Identity = 41.49%
	3	gi 34556551 ref NP_906366.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-34	Identity = 39.67%
	4	gi 149194218 ref ZP_01871315.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-23	Identity = 39.66%
	5	gi 126654701 ref ZP_01726235.1	Cyanothece sp. CCY0110	E-value = 4.00E-09	Identity = 27.04%
AB0046	1	<i>asnB1</i> gi 78776387 ref YP_392702.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-159	Identity = 51.17%
	2	gi 34558461 ref NP_908276.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-126	Identity = 43.17%
	3	gi 118475321 ref YP_892746.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-125	Identity = 44.09%
	4	gi 156719141 ref ZP_02060788.1	Hydrogenobaculum sp. Y04AAS1	E-value = 7.00E-115	Identity = 39.35%
	5	gi 149193735 ref ZP_01870833.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-94	Identity = 40.17%
AB0047	1		<b>*** No matches found ***</b>		
AB0048	1	gi 149194867 ref ZP_01871961.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-44	Identity = 36.29%
	2	gi 34558072 ref NP_907887.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-35	Identity = 26.90%
	3	gi 32267318 ref NP_861350.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-32	Identity = 28.37%
	4	gi 121541143 ref ZP_01672899.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 7.00E-31	Identity = 29.35%
	5	gi 34498271 ref NP_902486.1	Chromobacterium violaceum ATCC 12472	E-value = 6.00E-29	Identity = 27.16%
AB0049	1	gi 152993432 ref YP_001359153.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-33	Identity = 58.33%
	2	gi 34557582 ref NP_907397.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-33	Identity = 54.17%
	3	gi 34556816 ref NP_906631.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-33	Identity = 47.53%
	4	gi 109948211 ref YP_665439.1	Helicobacter acinonychis str. Sheeba	E-value = 7.00E-33	Identity = 56.64%
	5	gi 152989953 ref YP_001355675.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-32	Identity = 54.86%
AB0050	1	gi 152989818 ref YP_001355540.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-133	Identity = 58.91%
	2	gi 32267139 ref NP_861171.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-127	Identity = 57.28%
	3	gi 78776412 ref YP_392727.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-124	Identity = 57.91%
	4	gi 152993934 ref YP_001359655.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-121	Identity = 56.12%
	5	gi 34557620 ref NP_907435.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-121	Identity = 58.29%
AB0051	1	<i>rluB</i> gi 152989816 ref YP_001355538.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-72	Identity = 57.77%
	2	gi 15646068 ref NP_208250.1	Helicobacter pylori 26695	E-value = 6.00E-71	Identity = 55.82%
	3	gi 109946748 ref YP_663976.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-70	Identity = 56.63%
	4	gi 15612417 ref NP_224070.1	Helicobacter pylori J99	E-value = 3.00E-70	Identity = 55.42%
	5	gi 34558267 ref NP_908082.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-70	Identity = 53.26%
AB0052	1	gi 152989815 ref YP_001355537.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-110	Identity = 63.75%
	2	gi 152993936 ref YP_001359657.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-107	Identity = 62.81%
	3	gi 149194802 ref ZP_01871896.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-106	Identity = 65.94%
	4	gi 78776414 ref YP_392729.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-105	Identity = 62.07%
	5	gi 154148842 ref YP_001407261.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-104	Identity = 65.06%
AB0053	1	gi 34556520 ref NP_906335.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 68.07%
	2	gi 152989814 ref YP_001355536.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 68.95%
	3	gi 78778283 ref YP_394598.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 63.04%
	4	gi 149194710 ref ZP_01871805.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 61%
	5	gi 157165115 ref YP_001467823.1	Campylobacter concisus 13826	E-value = 0	Identity = 66.95%
AB0054	1	<i>ksgA</i> gi 78778284 ref YP_394599.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-64	Identity = 52.34%
	2	gi 152989813 ref YP_001355535.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-61	Identity = 48.84%
	3	gi 152993938 ref YP_001359659.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-60	Identity = 48.83%
	4	gi 57236897 ref YP_179850.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-59	Identity = 49.81%
	5	gi 148926802 ref ZP_01810481.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 5.00E-59	Identity = 49.81%
AB0055	1	<i>hisF1</i> gi 78778285 ref YP_394600.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-106	Identity = 76.68%
	2	gi 152993939 ref YP_001359660.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-106	Identity = 75.59%
	3	gi 152989811 ref YP_001355533.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-103	Identity = 76.49%
	4	gi 34556518 ref NP_906333.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-102	Identity = 72.83%

AB0056	5	gi 118474977 ref YP_892921.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-100	Identity = 73.52%
			*** No matches found ***		
AB0057	1	gi 78778286 ref YP_394601.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-57	Identity = 68.86%
	2	gi 152989810 ref YP_001355532.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-53	Identity = 60.92%
	3	gi 149194714 ref ZP_01871809.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-51	Identity = 62.92%
	4	gi 152993940 ref YP_001359661.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-50	Identity = 59.20%
	5	gi 34556517 ref NP_906332.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-40	Identity = 48.59%
AB0058	1	gi 78778287 ref YP_394602.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-133	Identity = 64.94%
	2	gi 152993941 ref YP_001359662.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-128	Identity = 64.57%
	3	gi 34556516 ref NP_906331.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-124	Identity = 64.27%
	4	gi 152989809 ref YP_001355531.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-124	Identity = 63.04%
	5	gi 157164532 ref YP_001467818.1	Campylobacter concisus 13826	E-value = 4.00E-122	Identity = 60.51%
AB0060	1	gi 154147872 ref YP_001405724.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-157	Identity = 60.13%
	2	gi 118475134 ref YP_892695.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-155	Identity = 59.78%
	3	gi 152991704 ref YP_001357425.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-155	Identity = 59.74%
	4	gi 34558490 ref NP_908305.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-153	Identity = 59.44%
	5	gi 86150731 ref ZP_01068947.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-151	Identity = 58.79%
AB0061	1	gi 146328793 ref YP_001209360.1	Dichelobacter nodosus VCS1703A	E-value = 6.00E-21	Identity = 61.18%
	2	gi 150385428 ref ZP_01924054.1	Victivallis vadensis ATCC BAA-548	E-value = 2.00E-20	Identity = 58.33%
	3	gi 78355840 ref YP_387289.1	Desulfovibrio desulfuricans G20	E-value = 3.00E-20	Identity = 59.52%
	4	gi 68552619 ref ZP_00592006.1	Prosthecochloris aestuarii DSM 271	E-value = 5.00E-20	Identity = 55.68%
	5	gi 145219698 ref YP_001130407.1	Prosthecochloris vibriiformis DSM 265	E-value = 8.00E-20	Identity = 59.77%
AB0062	1	gi 78777082 ref YP_393397.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-47	Identity = 45.87%
	2	gi 152992275 ref YP_001357996.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-45	Identity = 44.70%
	3	gi 57242734 ref ZP_00370671.1	Campylobacter upsaliensis RM3195	E-value = 6.00E-42	Identity = 45.16%
	4	gi 34557806 ref NP_907621.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-41	Identity = 45.83%
	5	gi 154174037 ref YP_001408153.1	Campylobacter curvus 525.92	E-value = 2.00E-40	Identity = 44.91%
AB0063	1	gi 152993451 ref YP_001359172.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-66	Identity = 36.57%
	2	gi 152992979 ref YP_001358700.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-50	Identity = 34.03%
	3	gi 152992381 ref YP_001358102.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-48	Identity = 31.84%
	4	gi 32267156 ref NP_861188.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-46	Identity = 34.64%
	5	gi 15645976 ref NP_208156.1	Helicobacter pylori 26695	E-value = 1.00E-45	Identity = 33.77%
AB0064	1	gi 78777078 ref YP_393393.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-15	Identity = 37.80%
	2	gi 108563696 ref YP_628012.1	Helicobacter pylori HPAG1	E-value = 2.00E-13	Identity = 37.01%
	3	gi 15645939 ref NP_208118.1	Helicobacter pylori 26695	E-value = 4.00E-13	Identity = 36.22%
	4	gi 15612311 ref NP_223964.1	Helicobacter pylori J99	E-value = 7.00E-13	Identity = 36.22%
	5	gi 109948131 ref YP_665359.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-11	Identity = 34.43%
AB0065	1		*** No matches found ***		
AB0066	1	gi 78777080 ref YP_393395.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-45	Identity = 39.02%
	2	gi 109948129 ref YP_665357.1	Helicobacter acinonychis str. Sheeba	E-value = 8.00E-40	Identity = 36.30%
	3	gi 15645941 ref NP_208120.1	Helicobacter pylori 26695	E-value = 8.00E-40	Identity = 36.63%
	4	gi 15612313 ref NP_223966.1	Helicobacter pylori J99	E-value = 2.00E-39	Identity = 36.30%
	5	gi 108563698 ref YP_628014.1	Helicobacter pylori HPAG1	E-value = 7.00E-39	Identity = 35.97%
AB0067	1	gi 78777081 ref YP_393396.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 62.9%
	2	gi 152992282 ref YP_001358003.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 59.67%
	3	gi 152990648 ref YP_001356370.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 55.81%
	4	gi 15612314 ref NP_223967.1	Helicobacter pylori J99	E-value = 0	Identity = 54.48%
	5	gi 108563699 ref YP_628015.1	Helicobacter pylori HPAG1	E-value = 0	Identity = 54.58%
AB0068	1	gi 34558489 ref NP_908304.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-39	Identity = 48.90%

	2	gi 51894086 ref YP_076777.1	Symbiobacterium thermophilum IAM 14863	E-value = 2.00E-33	Identity = 47.34%
	3	gi 108757273 ref YP_632528.1	Myxococcus xanthus DK 1622	E-value = 3.00E-31	Identity = 42.29%
	4	gi 146299493 ref YP_001194084.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-30	Identity = 45.20%
	5	gi 115376667 ref ZP_01463896.1	Stigmatella aurantiaca DW4/3-1	E-value = 1.00E-30	Identity = 41.28%
AB0070	1	gi 78776324 ref YP_392639.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-87	Identity = 45.12%
	2	gi 152991742 ref YP_001357463.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-70	Identity = 36.82%
	3	gi 157163885 ref YP_001467601.1	Campylobacter concisus 13826	E-value = 4.00E-68	Identity = 38.51%
	4	gi 118475280 ref YP_891399.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-67	Identity = 39.59%
	5	gi 154174165 ref YP_001409000.1	Campylobacter curvus 525.92	E-value = 4.00E-66	Identity = 37.61%
AB0071	1	gi 152991034 ref YP_001356756.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-21	Identity = 57.78%
	2	gi 152992279 ref YP_001358000.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-17	Identity = 53.93%
	3	gi 34557977 ref NP_907792.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-13	Identity = 41.96%
	4	gi 152993243 ref YP_001358964.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-08	Identity = 34.91%
	5	gi 152992278 ref YP_001357999.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-08	Identity = 36.70%
AB0072	1	gi 34557043 ref NP_906858.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-113	Identity = 42.81%
	2	gi 152991575 ref YP_001357297.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-96	Identity = 40.64%
	3	gi 152991640 ref YP_001357361.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-81	Identity = 41.43%
	4	gi 149194149 ref ZP_01871247.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-78	Identity = 39.55%
	5	gi 110600022 ref ZP_01388252.1	Geobacter sp. FRC-32	E-value = 4.00E-30	Identity = 28.63%
AB0073	1		<b>*** No matches found ***</b>		
AB0074	1	<i>thrS</i> gi 157414515 ref YP_001481771.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 0	Identity = 68.01%
	2	gi 15791593 ref NP_281416.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 0	Identity = 68.01%
	3	gi 57168347 ref ZP_00367481.1	Campylobacter coli RM2228	E-value = 0	Identity = 67.85%
	4	gi 86149734 ref ZP_01067964.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 0	Identity = 68.01%
	5	gi 121612820 ref YP_999926.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 0	Identity = 68.01%
AB0075	1	<i>infC</i> gi 78776268 ref YP_392583.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-55	Identity = 68.82%
	2	gi 152989861 ref YP_001355583.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-52	Identity = 67.25%
	3	gi 118474606 ref YP_892821.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-51	Identity = 69.54%
	4	gi 15791594 ref NP_281417.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-51	Identity = 68.97%
	5	gi 86153689 ref ZP_01071892.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-50	Identity = 68.39%
AB0076	1	<i>rpmI</i> gi 154149059 ref YP_001406081.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-08	Identity = 73.44%
	2	gi 54036292 sp Q7VJ07 RL35_HELHP	Helicobacter hepaticus	E-value = 1.00E-07	Identity = 66.15%
	3	gi 149194091 ref ZP_01871189.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-07	Identity = 71.43%
	4	gi 15611185 ref NP_222836.1	Helicobacter pylori J99	E-value = 3.00E-07	Identity = 67.69%
	5	gi 157165502 ref YP_001465939.1	Campylobacter concisus 13826	E-value = 5.00E-07	Identity = 67.74%
AB0077	1	<i>rplT</i> gi 34557221 ref NP_907036.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-35	Identity = 78.63%
	2	gi 149194092 ref ZP_01871190.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-34	Identity = 80.87%
	3	gi 157163866 ref YP_001465938.1	Campylobacter concisus 13826	E-value = 5.00E-33	Identity = 80.51%
	4	gi 152989863 ref YP_001355585.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-33	Identity = 78.26%
	5	gi 154174891 ref YP_001407370.1	Campylobacter curvus 525.92	E-value = 7.00E-33	Identity = 81.36%
AB0078	1	gi 34557042 ref NP_906857.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-73	Identity = 40.17%
	2	gi 78355726 ref YP_387175.1	Desulfovibrio desulfuricans G20	E-value = 2.00E-42	Identity = 32.75%
	3	gi 71908505 ref YP_286092.1	Dechloromonas aromatica RCB	E-value = 1.00E-37	Identity = 31.99%
	4	gi 94263912 ref ZP_01287716.1	delta proteobacterium MLMS-1	E-value = 5.00E-37	Identity = 28.83%
	5	gi 94267329 ref ZP_01290848.1	delta proteobacterium MLMS-1	E-value = 6.00E-37	Identity = 28.83%
AB0079	1	gi 152992922 ref YP_001358643.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-11	Identity = 50.68%
AB0080	1	gi 152991643 ref YP_001357364.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-172	Identity = 59.96%
	2	gi 78778276 ref YP_394591.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-132	Identity = 52.13%
	3	gi 34556669 ref NP_906484.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-117	Identity = 46.93%

	4	gi 152989908 ref YP_001355630.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-90	Identity = 40.20%
	5	gi 152992921 ref YP_001358642.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-89	Identity = 40.16%
AB0081	1	mobA gi 152991614 ref YP_001357335.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-32	Identity = 42.02%
	2	gi 78778213 ref YP_394528.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-30	Identity = 40.53%
	3	gi 154174777 ref YP_001409011.1	Campylobacter curvus 525.92	E-value = 1.00E-28	Identity = 40.32%
	4	gi 157164201 ref YP_001467596.1	Campylobacter concisus 13826	E-value = 6.00E-28	Identity = 41.01%
	5	gi 34558294 ref NP_908109.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-27	Identity = 40.00%
AB0082	1	leuC gi 78778211 ref YP_394526.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 79.95%
	2	gi 152991743 ref YP_001357464.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 77.7%
	3	gi 34556978 ref NP_906793.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 76.29%
	4	gi 152991410 ref YP_001357132.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 77.7%
	5	gi 118474772 ref YP_891400.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-180	Identity = 74.88%
AB0083	1	lspA gi 34557217 ref NP_907032.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-26	Identity = 50.00%
	2	gi 154174466 ref YP_001407401.1	Campylobacter curvus 525.92	E-value = 7.00E-23	Identity = 46.10%
	3	gi 157165011 ref YP_001465965.1	Campylobacter concisus 13826	E-value = 2.00E-22	Identity = 43.62%
	4	gi 57242726 ref ZP_00370663.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-22	Identity = 43.42%
	5	gi 157414657 ref YP_001481913.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 9.00E-22	Identity = 41.84%
AB0084	1	glmM gi 152991661 ref YP_001357382.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-171	Identity = 66.67%
	2	gi 152989858 ref YP_001355580.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-168	Identity = 67.57%
	3	gi 157164280 ref YP_001465966.1	Campylobacter concisus 13826	E-value = 9.00E-168	Identity = 68.02%
	4	gi 154173619 ref YP_001407402.1	Campylobacter curvus 525.92	E-value = 1.00E-163	Identity = 67.79%
	5	gi 34557216 ref NP_907031.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-163	Identity = 65.99%
AB0085	1	rpsT gi 118474807 ref YP_892836.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-12	Identity = 63.95%
	2	gi 57238624 ref YP_179755.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-11	Identity = 63.95%
	3	gi 153951103 ref YP_001398892.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-11	Identity = 63.95%
	4	gi 78778238 ref YP_394553.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-11	Identity = 59.30%
	5	gi 57241668 ref ZP_00369613.1	Campylobacter lari RM2100	E-value = 2.00E-11	Identity = 63.95%
AB0086	1	prfA gi 78778239 ref YP_394554.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-136	Identity = 71.83%
	2	gi 154174699 ref YP_001407404.1	Campylobacter curvus 525.92	E-value = 2.00E-133	Identity = 69.01%
	3	gi 88596258 ref ZP_01099495.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 5.00E-132	Identity = 71.27%
	4	gi 15792917 ref NP_282740.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-132	Identity = 71.27%
	5	gi 86152274 ref ZP_01070485.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 6.00E-132	Identity = 71.27%
AB0087	1		<b>*** No matches found ***</b>		
AB0088	1	pstS gi 92113600 ref YP_573528.1	Chromohalobacter salexigens DSM 3043	E-value = 2.00E-104	Identity = 58.54%
	2	gi 34557337 ref NP_907152.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-100	Identity = 56.52%
	3	gi 67918870 ref ZP_00512462.1	Chlorobium limicola DSM 245	E-value = 2.00E-92	Identity = 51.30%
	4	gi 78188479 ref YP_378817.1	Chlorobium chlorochromatii CaD3	E-value = 1.00E-90	Identity = 51.95%
	5	gi 83591937 ref YP_425689.1	Rhodospirillum rubrum ATCC 11170	E-value = 1.00E-90	Identity = 54.77%
AB0089	1	gi 149194928 ref ZP_01872021.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-132	Identity = 49.03%
	2	gi 144898329 emb CAM75193.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 1.00E-114	Identity = 38.15%
	3	gi 46201018 ref ZP_00055892.2	Magnetospirillum magnetotacticum MS-1	E-value = 2.00E-100	Identity = 34.21%
	4	gi 118588603 ref ZP_01546011.1	Stappia aggregata IAM 12614	E-value = 2.00E-95	Identity = 35.04%
	5	gi 116251042 ref YP_766880.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 5.00E-87	Identity = 32.28%
AB0090	1	pstC gi 34557336 ref NP_907151.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-96	Identity = 64.29%
	2	gi 92113601 ref YP_573529.1	Chromohalobacter salexigens DSM 3043	E-value = 7.00E-92	Identity = 61.30%
	3	gi 78188478 ref YP_378816.1	Chlorobium chlorochromatii CaD3	E-value = 4.00E-87	Identity = 58.93%
	4	gi 67918871 ref ZP_00512463.1	Chlorobium limicola DSM 245	E-value = 1.00E-82	Identity = 58.18%
	5	gi 69938337 ref ZP_00632834.1	Paracoccus denitrificans PD1222	E-value = 4.00E-76	Identity = 54.18%
AB0091	1	pstA gi 34557335 ref NP_907150.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-134	Identity = 62.47%



	2	gi 92113602 ref YP_573530.1	Chromohalobacter salexigens DSM 3043	E-value = 1.00E-124	Identity = 58.62%
	3	gi 78188477 ref YP_378815.1	Chlorobium chlorochromatii CaD3	E-value = 6.00E-110	Identity = 51.86%
	4	gi 67918872 ref ZP_00512464.1	Chlorobium limicola DSM 245	E-value = 3.00E-100	Identity = 51.55%
	5	gi 67939612 ref ZP_00532107.1	Chlorobium phaeobacteroides BS1	E-value = 1.00E-99	Identity = 47.30%
AB0092	1	<i>pstB</i> gi 34557334 ref NP_907149.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-106	Identity = 69.53%
	2	gi 92113603 ref YP_573531.1	Chromohalobacter salexigens DSM 3043	E-value = 3.00E-100	Identity = 66.67%
	3	gi 15669201 ref NP_248006.1	Methanocaldococcus jannaschii DSM 2661	E-value = 3.00E-100	Identity = 69.32%
	4	gi 45358661 ref NP_988218.1	Methanococcus maripaludis S2	E-value = 2.00E-96	Identity = 68.13%
	5	gi 150401003 ref YP_001324769.1	Methanococcus aeolicus Nankai-3	E-value = 1.00E-95	Identity = 67.98%
AB0093	1	gi 152990330 ref YP_001356052.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-28	Identity = 36.41%
	2	gi 78778082 ref YP_394397.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-25	Identity = 35.16%
	3	gi 152993844 ref YP_001359565.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-20	Identity = 32.58%
	4	gi 144900226 emb CAM77090.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 3.00E-07	Identity = 26.15%
	5	gi 114327578 ref YP_744735.1	Granulibacter betshdensis CGDN1H1	E-value = 7.00E-07	Identity = 26.22%
AB0094	1		<b>*** No matches found ***</b>		
AB0095	1	gi 78777756 ref YP_394071.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-53	Identity = 54.30%
	2	gi 34557339 ref NP_907154.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-50	Identity = 53.39%
	3	gi 154148866 ref YP_001406002.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-49	Identity = 53.64%
	4	gi 152991494 ref YP_001357216.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-48	Identity = 54.09%
	5	gi 152993849 ref YP_001359570.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-47	Identity = 50.00%
AB0096	1	gi 152991493 ref YP_001357215.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-69	Identity = 35.95%
	2	gi 78777755 ref YP_394070.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-69	Identity = 37.86%
	3	gi 34557340 ref NP_907155.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-58	Identity = 35.23%
	4	gi 154148145 ref YP_001406001.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-51	Identity = 34.42%
	5	gi 106885381 ref ZP_01352742.1	Clostridium phytofermentans ISDg	E-value = 2.00E-33	Identity = 27.03%
AB0097	1	<i>rplM</i> gi 34558418 ref NP_908233.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-51	Identity = 70.80%
	2	gi 152991784 ref YP_001357505.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-51	Identity = 72.26%
	3	gi 32265997 ref NP_860029.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-51	Identity = 70.07%
	4	gi 15792795 ref NP_282618.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-49	Identity = 71.85%
	5	gi 78776293 ref YP_392608.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-49	Identity = 68.12%
AB0098	1	<i>rpsI</i> gi 34558417 ref NP_908232.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-41	Identity = 72.09%
	2	gi 32265998 ref NP_860030.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-41	Identity = 72.87%
	3	gi 157164941 ref YP_001466194.1	Campylobacter concisus 13826	E-value = 1.00E-39	Identity = 66.67%
	4	gi 148925648 ref ZP_01809336.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 3.00E-39	Identity = 67.44%
	5	gi 152991350 ref YP_001357072.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-39	Identity = 62.79%
AB0099	1	<i>appA</i> gi 152991348 ref YP_001357070.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-165	Identity = 56.28%
	2	gi 78776295 ref YP_392610.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-153	Identity = 55.51%
	3	gi 78222448 ref YP_384195.1	Geobacter metallireducens GS-15	E-value = 1.00E-108	Identity = 38.54%
	4	gi 39996533 ref NP_952484.1	Geobacter sulfurreducens PCA	E-value = 8.00E-108	Identity = 37.93%
	5	gi 118581066 ref YP_902316.1	Pelobacter propionicus DSM 2379	E-value = 4.00E-107	Identity = 39.67%
AB0100	1	gi 78776296 ref YP_392611.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-55	Identity = 54.03%
	2	gi 149195078 ref ZP_01872170.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-50	Identity = 50.48%
	3	gi 152991793 ref YP_001357514.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-49	Identity = 47.62%
	4	gi 118474263 ref YP_891593.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-47	Identity = 48.80%
	5	gi 154175079 ref YP_001407585.1	Campylobacter curvus 525.92	E-value = 5.00E-46	Identity = 44.91%
AB0102	1	gi 149909488 ref ZP_01898142.1	Moritella sp. PE36	E-value = 9.00E-100	Identity = 56.23%
	2	gi 27366025 ref NP_761553.1	Vibrio vulnificus CMCP6	E-value = 1.00E-99	Identity = 57.19%
	3	gi 153833073 ref ZP_01985740.1	Vibrio Harveyi HY01	E-value = 1.00E-98	Identity = 55.31%
	4	gi 89094282 ref ZP_01167224.1	Oceanospirillum sp. MED92	E-value = 3.00E-98	Identity = 57.19%

	5	gi 86145890 ref ZP_01064218.1	Vibrio sp. MED222	E-value = 1.00E-97	Identity = 55.00%
AB0103	1	gi 149909489 ref ZP_01898143.1	Moritella sp. PE36	E-value = 8.00E-11	Identity = 31.01%
	2	gi 126175631 ref YP_001051780.1	Shewanella baltica OS155	E-value = 1.00E-10	Identity = 30.26%
	3	gi 153802269 ref ZP_01956855.1	Vibrio cholerae MZO-3	E-value = 1.00E-10	Identity = 32.89%
	4	gi 116217501 ref ZP_01483300.1	Vibrio cholerae RC385	E-value = 1.00E-10	Identity = 32.89%
	5	gi 153833102 ref ZP_01985769.1	Vibrio harveyi HY01	E-value = 1.00E-10	Identity = 31.33%
AB0104	1	gi 89094284 ref ZP_01167226.1	Oceanospirillum sp. MED92	E-value = 4.00E-171	Identity = 73.07%
	2	gi 156974698 ref YP_001445605.1	Vibrio harveyi ATCC BAA-1116	E-value = 2.00E-167	Identity = 67.53%
	3	gi 149190001 ref ZP_01868279.1	Vibrio shilonii AK1	E-value = 2.00E-167	Identity = 67.87%
	4	gi 28898427 ref NP_798032.1	Vibrio parahaemolyticus RIMD 2210633	E-value = 2.00E-166	Identity = 67.13%
	5	gi 116186986 ref ZP_01476877.1	Vibrio sp. Ex25	E-value = 3.00E-166	Identity = 67.13%
AB0105	1	gi 34557780 ref NP_907595.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-39	Identity = 41.63%
	2	gi 118475245 ref YP_891579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-32	Identity = 38.39%
	3	gi 34558806 gb AAQ75151.1	Alvinella pompejana epibiont 6C6	E-value = 1.00E-30	Identity = 40.27%
	4	gi 152993952 ref YP_001359673.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-30	Identity = 34.80%
	5	gi 154173869 ref YP_001407525.1	Campylobacter curvus 525.92	E-value = 1.00E-29	Identity = 35.71%
AB0106	1	gi 78777177 ref YP_393492.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-35	Identity = 28.89%
AB0107	1	gi 152990078 ref YP_001355800.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-55	Identity = 49.52%
	2	gi 152991985 ref YP_001357706.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-54	Identity = 48.58%
	3	gi 152990058 ref YP_001355780.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-52	Identity = 48.28%
	4	gi 78776363 ref YP_392678.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-50	Identity = 43.75%
	5	gi 46446692 ref YP_008057.1	Candidatus Protochlamydia amoebophila UWE25	E-value = 1.00E-44	Identity = 39.72%
AB0108	1	gi 126727075 ref ZP_01742913.1	Rhodobacteriales bacterium HTCC2150	E-value = 4.00E-38	Identity = 29.79%
	2	gi 114762688 ref ZP_01442122.1	Roseovarius sp. HTCC2601	E-value = 7.00E-38	Identity = 31.29%
	3	gi 118738749 ref ZP_01586830.1	Dinoroseobacter shibae DFL 12	E-value = 1.00E-36	Identity = 30.99%
	4	gi 89067648 ref ZP_01155102.1	Oceanicola granulosus HTCC2516	E-value = 2.00E-36	Identity = 30.91%
	5	gi 110679433 ref YP_682440.1	Roseobacter denitrificans OCh 114	E-value = 2.00E-36	Identity = 27.68%
AB0109	1	gi 153836554 ref ZP_01989221.1	Vibrio parahaemolyticus AQ3810	E-value = 1.00E-08	Identity = 26.11%
	2	gi 27363498 ref NP_759026.1	Vibrio vulnificus CMCP6	E-value = 1.00E-07	Identity = 25.00%
	3	gi 29654064 ref NP_819756.1	Coxiella burnetii RSA 493	E-value = 3.00E-07	Identity = 27.56%
AB0110	1	gi 152992946 ref YP_001358667.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-32	Identity = 31.83%
	2	gi 121612777 ref YP_001001291.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 5.00E-30	Identity = 35.08%
	3	gi 15792953 ref NP_282776.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-30	Identity = 35.08%
	4	gi 57238659 ref YP_179790.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-29	Identity = 34.75%
	5	gi 153951405 ref YP_001398925.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 3.00E-29	Identity = 34.10%
AB0111	1	gi 57240652 ref ZP_00368600.1	Campylobacter lari RM2100	E-value = 6.00E-58	Identity = 52.81%
	2	gi 108563875 ref YP_628191.1	Helicobacter pylori HPAG1	E-value = 3.00E-55	Identity = 46.93%
	3	gi 15646074 ref NP_208256.1	Helicobacter pylori 26695	E-value = 5.00E-55	Identity = 46.93%
	4	gi 154174209 ref YP_001408229.1	Campylobacter curvus 525.92	E-value = 6.00E-55	Identity = 49.12%
	5	gi 15612423 ref NP_224076.1	Helicobacter pylori J99	E-value = 2.00E-54	Identity = 46.49%
AB0112	1	gi 152992948 ref YP_001358669.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-83	Identity = 45.14%
	2	gi 119945392 ref YP_943072.1	Psychromonas ingrahamii 37	E-value = 5.00E-81	Identity = 42.97%
	3	gi 57240651 ref ZP_00368599.1	Campylobacter lari RM2100	E-value = 1.00E-73	Identity = 46.09%
	4	gi 153951693 ref YP_001398923.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 8.00E-72	Identity = 45.58%
	5	gi 57168794 ref ZP_00367925.1	Campylobacter coli RM2228	E-value = 2.00E-71	Identity = 45.68%
AB0113	1	gi 150025607 ref YP_001296433.1	Flavobacterium psychrophilum JIP02/86	E-value = 1.00E-20	Identity = 29.55%
	2	gi 152993839 ref YP_001359560.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-13	Identity = 29.65%
AB0114	1	gi 146300757 ref YP_001195348.1	Flavobacterium johnsoniae UW101	E-value = 6.00E-28	Identity = 26.72%
AB0115	1	gi 57168077 ref ZP_00367216.1	Campylobacter coli RM2228	E-value = 8.00E-71	Identity = 77.64%

	2	gi 148926201 ref ZP_01809886.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 1.00E-70	Identity = 78.26%
	3	gi 86150303 ref ZP_01068529.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 2.00E-70	Identity = 77.64%
	4	gi 86152712 ref ZP_01070917.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-70	Identity = 78.26%
	5	gi 57238070 ref YP_179319.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-70	Identity = 77.64%
AB0116	1		<b>*** No matches found ***</b>		
AB0117	1	gi 78778127 ref YP_394442.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-58	Identity = 49.17%
	2	gi 152991800 ref YP_001357521.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-54	Identity = 46.50%
	3	gi 152991340 ref YP_001357062.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-49	Identity = 48.29%
	4	gi 149195377 ref ZP_01872462.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-43	Identity = 50.74%
	5	gi 34556885 ref NP_906700.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-38	Identity = 36.99%
AB0118	1	gi 34557129 ref NP_906944.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-68	Identity = 53.87%
	2	gi 67938599 ref ZP_00531122.1	Chlorobium phaeobacteroides BS1	E-value = 3.00E-57	Identity = 50.00%
	3	gi 68551674 ref ZP_00591069.1	Prosthecochloris aestuarii DSM 271	E-value = 7.00E-55	Identity = 45.98%
	4	gi 78186778 ref YP_374821.1	Pelodictyon luteolum DSM 273	E-value = 4.00E-51	Identity = 47.81%
	5	gi 119357228 ref YP_911872.1	Chlorobium phaeobacteroides DSM 266	E-value = 1.00E-46	Identity = 46.29%
AB0119	1	gi 154173815 ref YP_001408415.1	Campylobacter curvus 525.92	E-value = 3.00E-37	Identity = 47.20%
	2	gi 157165760 ref YP_001466666.1	Campylobacter concisus 13826	E-value = 9.00E-34	Identity = 44.10%
	3	gi 118475733 ref YP_891754.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-32	Identity = 48.68%
	4	gi 57240588 ref ZP_00368537.1	Campylobacter lari RM2100	E-value = 4.00E-32	Identity = 44.23%
	5	gi 154148116 ref YP_001406642.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-30	Identity = 42.31%
AB0120	1	gi 78777959 ref YP_394274.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-29	Identity = 55.12%
	2	gi 68552281 ref ZP_00591672.1	Prosthecochloris aestuarii DSM 271	E-value = 8.00E-26	Identity = 52.00%
	3	gi 146283551 ref YP_001173704.1	Pseudomonas stutzeri A1501	E-value = 2.00E-25	Identity = 50.81%
	4	gi 50122075 ref YP_051242.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 3.00E-25	Identity = 50.41%
	5	gi 32266558 ref NP_860590.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-24	Identity = 45.31%
AB0121	1	gi 78778225 ref YP_394540.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 65.27%
	2	gi 152993401 ref YP_001359122.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 62.52%
	3	gi 152990298 ref YP_001356020.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 61.47%
	4	gi 34557599 ref NP_907414.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 54.67%
	5	gi 86609654 ref YP_478416.1	Synechococcus sp. JA-2-3B'a(2-13)	E-value = 0	Identity = 41.05%
AB0122	1	gi 78778071 ref YP_394386.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-126	Identity = 70.68%
	2	gi 149194823 ref ZP_01871917.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-125	Identity = 69.84%
	3	gi 34556545 ref NP_906360.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-123	Identity = 66.89%
	4	gi 152991284 ref YP_001357006.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-122	Identity = 67.87%
	5	gi 57241400 ref ZP_00369346.1	Campylobacter lari RM2100	E-value = 2.00E-115	Identity = 64.59%
AB0123	1	gi 34556544 ref NP_906359.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-101	Identity = 59.09%
	2	gi 152991285 ref YP_001357007.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-99	Identity = 55.71%
	3	gi 149194824 ref ZP_01871918.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-92	Identity = 54.63%
	4	gi 154175268 ref YP_001407529.1	Campylobacter curvus 525.92	E-value = 6.00E-91	Identity = 55.98%
	5	gi 154148517 ref YP_001406987.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-90	Identity = 54.17%
AB0124	1		<b>*** No matches found ***</b>		
AB0125	1	gi 78778069 ref YP_394384.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-78	Identity = 68.16%
	2	gi 152991833 ref YP_001357554.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-70	Identity = 63.35%
	3	gi 34556543 ref NP_906358.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-69	Identity = 59.19%
	4	gi 152991286 ref YP_001357008.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-68	Identity = 61.09%
	5	gi 149194825 ref ZP_01871919.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-67	Identity = 63.30%
AB0126	1		<b>*** No matches found ***</b>		
AB0127	1	gi 152990346 ref YP_001356068.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-133	Identity = 66.49%
	2	gi 152992119 ref YP_001357840.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-128	Identity = 63.86%

	3	gi 57504882 ref ZP_00370857.1	Campylobacter coli RM2228	E-value = 7.00E-117	Identity = 57.92%
	4	gi 153952410 ref YP_001398887.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 8.00E-117	Identity = 58.20%
	5	gi 86152336 ref ZP_01070547.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-116	Identity = 57.92%
AB0128	1	<i>thiC</i> gi 152990345 ref YP_001356067.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 82.54%
	2	gi 78777683 ref YP_393998.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 83.14%
	3	gi 32267080 ref NP_861112.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 76.24%
	4	gi 34558232 ref NP_908047.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 77.32%
	5	gi 118475288 ref YP_891612.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 75.8%
AB0129	1	gi 78777397 ref YP_393712.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-32	Identity = 31.30%
	2	gi 78776743 ref YP_393058.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-29	Identity = 31.32%
	3	gi 154175137 ref YP_001407999.1	Campylobacter curvus 525.92	E-value = 7.00E-27	Identity = 27.57%
	4	gi 34558171 ref NP_907986.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-25	Identity = 26.89%
	5	gi 157165151 ref YP_001467161.1	Campylobacter concisus 13826	E-value = 1.00E-23	Identity = 27.11%
AB0130	1	<i>ispDF</i> gi 152992118 ref YP_001357839.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-113	Identity = 52.14%
	2	gi 149194421 ref ZP_01871518.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-109	Identity = 55.68%
	3	gi 118474192 ref YP_891611.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-109	Identity = 53.49%
	4	gi 78777684 ref YP_393999.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-108	Identity = 52.97%
	5	gi 152990344 ref YP_001356066.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-107	Identity = 50.40%
AB0131	1	gi 78777685 ref YP_394000.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-51	Identity = 41.67%
	2	gi 152992117 ref YP_001357838.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-50	Identity = 41.41%
	3	gi 154175524 ref YP_001408624.1	Campylobacter curvus 525.92	E-value = 4.00E-49	Identity = 39.39%
	4	gi 152990343 ref YP_001356065.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-48	Identity = 41.41%
	5	gi 157164723 ref YP_001466559.1	Campylobacter concisus 13826	E-value = 2.00E-47	Identity = 38.72%
AB0132	1	<i>pgpA</i> gi 78777687 ref YP_394002.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-34	Identity = 50.00%
	2	gi 32267083 ref NP_861115.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-33	Identity = 55.33%
	3	gi 34558228 ref NP_908043.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-32	Identity = 53.80%
	4	gi 57504878 ref ZP_00370853.1	Campylobacter coli RM2228	E-value = 1.00E-31	Identity = 52.56%
	5	gi 57505829 ref ZP_00371754.1	Campylobacter upsaliensis RM3195	E-value = 5.00E-31	Identity = 51.28%
AB0133	1	gi 106895541 ref ZP_01362630.1	Clostridium sp. OhLAs	E-value = 7.00E-16	Identity = 36.13%
AB0134	1	<i>carA</i> gi 78776281 ref YP_392596.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-145	Identity = 67.56%
	2	gi 152991772 ref YP_001357493.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-144	Identity = 67.02%
	3	gi 34558335 ref NP_908150.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-136	Identity = 63.98%
	4	gi 149194998 ref ZP_01872091.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-135	Identity = 66.84%
	5	gi 152991364 ref YP_001357086.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-135	Identity = 65.68%
AB0135	1	gi 154173949 ref YP_001407568.1	Campylobacter curvus 525.92	E-value = 1.00E-47	Identity = 54.10%
	2	gi 157165281 ref YP_001466178.1	Campylobacter concisus 13826	E-value = 2.00E-45	Identity = 49.73%
	3	gi 118474830 ref YP_891575.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-43	Identity = 47.54%
	4	gi 57169079 ref ZP_00368206.1	Campylobacter coli RM2228	E-value = 3.00E-39	Identity = 48.35%
	5	gi 152991771 ref YP_001357492.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-38	Identity = 47.54%
AB0136	1	<i>purA</i> gi 78776276 ref YP_392591.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 75.85%
	2	gi 118475039 ref YP_891572.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-176	Identity = 68.60%
	3	gi 157165191 ref YP_001467552.1	Campylobacter concisus 13826	E-value = 2.00E-175	Identity = 69.57%
	4	gi 57240899 ref ZP_00368847.1	Campylobacter lari RM2100	E-value = 1.00E-173	Identity = 68.28%
	5	gi 157415722 ref YP_001482978.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-173	Identity = 68.28%
AB0137	1	gi 78776275 ref YP_392590.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-72	Identity = 48.75%
	2	gi 152991769 ref YP_001357490.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-69	Identity = 44.69%
	3	gi 154175309 ref YP_001408901.1	Campylobacter curvus 525.92	E-value = 1.00E-68	Identity = 46.74%
	4	gi 152991367 ref YP_001357089.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-68	Identity = 44.13%
	5	gi 34558342 ref NP_908157.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-67	Identity = 43.37%

AB0138	1	gi 34556482 ref NP_906297.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-137	Identity = 67.03%
	2	gi 152991768 ref YP_001357489.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-125	Identity = 63.88%
	3	gi 78776274 ref YP_392589.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-121	Identity = 63.49%
	4	gi 32266408 ref NP_860440.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-116	Identity = 58.04%
	5	gi 152991368 ref YP_001357090.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-115	Identity = 58.86%
AB0139	1	gi 78778226 ref YP_394541.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-26	Identity = 37.97%
	2	gi 42524478 ref NP_969858.1	Bdellovibrio bacteriovorus HD100	E-value = 4.00E-22	Identity = 34.57%
	3	gi 51894086 ref YP_076777.1	Symbiobacterium thermophilum IAM 14863	E-value = 3.00E-21	Identity = 33.53%
	4	gi 21223888 ref NP_629667.1	Streptomyces coelicolor A3(2)	E-value = 1.00E-20	Identity = 35.47%
	5	gi 34558489 ref NP_908304.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-20	Identity = 32.40%
AB0140	1	gi 150017899 ref YP_001310153.1	Clostridium beijerinckii NCIMB 8052	E-value = 4.00E-20	Identity = 39.58%
	2	gi 125718200 ref YP_001035333.1	Streptococcus sanguinis SK36	E-value = 1.00E-17	Identity = 37.12%
	3	gi 157151017 ref YP_001450580.1	Streptococcus gordonii str. Challis substr. CH1	E-value = 4.00E-16	Identity = 37.21%
	4	gi 15675758 ref NP_269932.1	Streptococcus pyogenes M1 GAS	E-value = 7.00E-16	Identity = 36.36%
	5	gi 50915025 ref YP_060997.1	Streptococcus pyogenes MGAS10394	E-value = 8.00E-16	Identity = 36.36%
AB0141	1	gi 78778226 ref YP_394541.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-40	Identity = 51.34%
	2	gi 42524478 ref NP_969858.1	Bdellovibrio bacteriovorus HD100	E-value = 2.00E-34	Identity = 41.97%
	3	gi 51894086 ref YP_076777.1	Symbiobacterium thermophilum IAM 14863	E-value = 3.00E-33	Identity = 50.60%
	4	gi 120405483 ref YP_955312.1	Mycobacterium vanbaalenii PYR-1	E-value = 3.00E-31	Identity = 47.16%
	5	gi 149277643 ref ZP_01883784.1	Pedobacter sp. BAL39	E-value = 3.00E-31	Identity = 49.07%
AB0142	1	gi 15598035 ref NP_251529.1	Pseudomonas aeruginosa PAO1	E-value = 3.00E-35	Identity = 35.81%
	2	gi 116050843 ref YP_790334.1	Pseudomonas aeruginosa UCBPP-PA14	E-value = 3.00E-35	Identity = 36.24%
	3	gi 148549052 ref YP_001269154.1	Pseudomonas putida F1	E-value = 8.00E-35	Identity = 34.20%
	4	gi 152986274 ref YP_001347686.1	Pseudomonas aeruginosa PA7	E-value = 3.00E-34	Identity = 33.46%
	5	gi 26988599 ref NP_744024.1	Pseudomonas putida KT2440	E-value = 4.00E-34	Identity = 34.20%
AB0143	1	<i>pirA</i> gi 106886119 ref ZP_01353466.1	Clostridium phytofermentans ISDg	E-value = 6.00E-67	Identity = 57.94%
	2	gi 106894568 ref ZP_01361686.1	Clostridium sp. OhILAs	E-value = 2.00E-66	Identity = 55.98%
	3	gi 153940961 ref YP_001390207.1	Clostridium botulinum F str. Langeland	E-value = 3.00E-66	Identity = 57.69%
	4	gi 150017898 ref YP_001310152.1	Clostridium beijerinckii NCIMB 8052	E-value = 4.00E-66	Identity = 58.12%
	5	gi 148378852 ref YP_001253393.1	Clostridium botulinum A str. ATCC 3502	E-value = 3.00E-65	Identity = 56.84%
AB0144	1	<i>gapB</i> gi 84517644 ref ZP_01004993.1	Prochlorococcus marinus str. MIT 9211	E-value = 3.00E-56	Identity = 37.13%
	2	gi 145954648 ref ZP_01803653.1	Clostridium difficile QCD-32g58	E-value = 2.00E-42	Identity = 33.72%
	3	gi 126699376 ref YP_001088273.1	Clostridium difficile 630	E-value = 3.00E-42	Identity = 33.72%
	4	gi 152976965 ref YP_001376482.1	Bacillus cereus subsp. cytotoxis NVH 391-98	E-value = 6.00E-41	Identity = 32.45%
	5	gi 94501439 ref ZP_01307958.1	Oceanobacter sp. RED65	E-value = 1.00E-40	Identity = 31.88%
AB0145	1	<i>purM</i> gi 152993932 ref YP_001359653.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-131	Identity = 71.90%
	2	gi 78778244 ref YP_394559.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-131	Identity = 71.30%
	3	gi 152989851 ref YP_001355573.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-129	Identity = 68.69%
	4	gi 149194992 ref ZP_01872085.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-129	Identity = 72.00%
	5	gi 157164168 ref YP_001465934.1	Campylobacter concisus 13826	E-value = 1.00E-117	Identity = 68.01%
AB0146	1	<i>speE</i> gi 78778242 ref YP_394557.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-25	Identity = 40.88%
	2	gi 32267198 ref NP_861230.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-11	Identity = 29.05%
	3	gi 34558427 ref NP_908242.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-11	Identity = 30.39%
	4	gi 149194745 ref ZP_01871840.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-06	Identity = 27.65%
AB0147	1	<i>coaE</i> gi 152989853 ref YP_001355575.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-53	Identity = 59.79%
	2	gi 78778241 ref YP_394556.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-42	Identity = 51.58%
	3	gi 152993981 ref YP_001359702.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-40	Identity = 50.00%
	4	gi 15611837 ref NP_223488.1	Helicobacter pylori J99	E-value = 6.00E-39	Identity = 46.15%
	5	gi 34558428 ref NP_908243.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-39	Identity = 46.03%

AB0148	1	<i>dapF</i>	gij152989854 ref YP_001355576.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-71	Identity = 58.02%
			gij78778240 ref YP_394555.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-70	Identity = 54.12%
			gij149194724 ref ZP_01871819.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-67	Identity = 56.20%
			gij118475771 ref YP_892886.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-65	Identity = 53.44%
			gij157163987 ref YP_001465937.1	Campylobacter concisus 13826	E-value = 7.00E-64	Identity = 50.41%
AB0149	1	<i>purT</i>	gij152989880 ref YP_001355602.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-164	Identity = 74.23%
			gij152991751 ref YP_001357472.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-160	Identity = 71.91%
			gij78776234 ref YP_392549.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-158	Identity = 70.62%
			gij149194863 ref ZP_01871957.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-145	Identity = 66.75%
			gij34557962 ref NP_907777.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-137	Identity = 63.97%
AB0150	1		gij146297912 ref YP_001192503.1	Flavobacterium johnsoniae UW101	E-value = 2.00E-35	Identity = 50.00%
			gij66805591 ref XP_636517.1	Dictyostelium discoideum AX4	E-value = 2.00E-32	Identity = 50.98%
			gij88806543 ref ZP_01122060.1	Robiginitalea biformata HTCC2501	E-value = 1.00E-31	Identity = 44.30%
			gij86133536 ref ZP_01052118.1	Tenacibaculum sp. MED152	E-value = 3.00E-24	Identity = 43.95%
			gij88803244 ref ZP_01118770.1	Polaribacter irgensii 23-P	E-value = 1.00E-23	Identity = 42.48%
AB0151	1		gij124545257 ref ZP_01704462.1	Shewanella putrefaciens 200	E-value = 7.00E-07	Identity = 35.16%
AB0152	1		gij58616391 ref YP_195521.1	Azoarcus sp. EbN1	E-value = 1.00E-66	Identity = 31.70%
			gij124262593 ref YP_001023063.1	Methylibium petroleiphilum PM1	E-value = 4.00E-56	Identity = 31.20%
			gij91791171 ref YP_552121.1	Polaromonas sp. JS666	E-value = 9.00E-56	Identity = 29.13%
			gij120554230 ref YP_958581.1	Marinobacter aquaeolei VT8	E-value = 7.00E-52	Identity = 27.95%
			gij156933964 ref YP_001437880.1	Enterobacter sakazakii ATCC BAA-894	E-value = 2.00E-51	Identity = 31.00%
AB0153	1	<i>ubiA</i>	gij78778005 ref YP_394320.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-91	Identity = 68.33%
			gij152990053 ref YP_001355775.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-90	Identity = 67.51%
			gij152993791 ref YP_001359512.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-88	Identity = 66.55%
			gij154175423 ref YP_001407493.1	Campylobacter curvus 525.92	E-value = 1.00E-82	Identity = 61.07%
			gij157165573 ref YP_001466048.1	Campylobacter concisus 13826	E-value = 6.00E-79	Identity = 59.64%
AB0154	1		<b>*** No matches found ***</b>			
AB0155	1	<i>miaA</i>	gij152990052 ref YP_001355774.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-69	Identity = 52.54%
			gij78778006 ref YP_394321.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-66	Identity = 49.66%
			gij152993793 ref YP_001359514.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-65	Identity = 48.47%
			gij157164731 ref YP_001466050.1	Campylobacter concisus 13826	E-value = 1.00E-63	Identity = 46.88%
			gij154174124 ref YP_001407491.1	Campylobacter curvus 525.92	E-value = 6.00E-62	Identity = 45.52%
AB0156	1	<i>rpmE</i>	gij118474643 ref YP_891489.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-18	Identity = 70.77%
			gij57168672 ref ZP_00367804.1	Campylobacter coli RM2228	E-value = 1.00E-17	Identity = 72.31%
			gij57241384 ref ZP_00369330.1	Campylobacter lari RM2100	E-value = 1.00E-17	Identity = 73.85%
			gij153951925 ref YP_001397413.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-17	Identity = 70.77%
			gij15791543 ref NP_281366.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-17	Identity = 70.77%
AB0157	1		gij149195113 ref ZP_01872205.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-73	Identity = 58.43%
			gij152991817 ref YP_001357538.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-71	Identity = 50.00%
			gij34556872 ref NP_906687.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-68	Identity = 49.82%
			gij152991300 ref YP_001357022.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-66	Identity = 50.38%
			gij78778103 ref YP_394418.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-66	Identity = 49.63%
AB0158	1		gij34556873 ref NP_906688.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-51	Identity = 48.26%
			gij154174304 ref YP_001407505.1	Campylobacter curvus 525.92	E-value = 7.00E-51	Identity = 47.98%
			gij152991818 ref YP_001357539.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-51	Identity = 48.47%
			gij157164272 ref YP_001466038.1	Campylobacter concisus 13826	E-value = 2.00E-50	Identity = 48.43%
			gij109947425 ref YP_664653.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-49	Identity = 49.78%
AB0159	1		gij78778100 ref YP_394415.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-32	Identity = 32.95%
			gij34556875 ref NP_906690.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-26	Identity = 26.07%

	3	gi 118475591 ref YP_891493.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-24	Identity = 30.92%
	4	gi 109947423 ref YP_664651.1	Helicobacter acinonychis str. Sheeba	E-value = 4.00E-22	Identity = 26.62%
	5	gi 15645180 ref NP_207350.1	Helicobacter pylori 26695	E-value = 4.00E-21	Identity = 26.24%
AB0160	1	aspB1 gi 157165123 ref YP_001466035.1	Campylobacter concisus 13826	E-value = 2.00E-169	Identity = 70.47%
	2	gi 154174215 ref YP_001407508.1	Campylobacter curvus 525.92	E-value = 4.00E-168	Identity = 69.15%
	3	gi 34556876 ref NP_906691.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-168	Identity = 68.98%
	4	gi 152991296 ref YP_001357018.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-166	Identity = 70.05%
	5	gi 57241389 ref ZP_00369335.1	Campylobacter lari RM2100	E-value = 9.00E-165	Identity = 69.25%
AB0161	1	hom gi 152991295 ref YP_001357017.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-151	Identity = 68.02%
	2	gi 152991821 ref YP_001357542.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-140	Identity = 64.71%
	3	gi 34556877 ref NP_906692.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-138	Identity = 65.71%
	4	gi 78778098 ref YP_394413.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-135	Identity = 68.97%
	5	gi 157163938 ref YP_001466034.1	Campylobacter concisus 13826	E-value = 2.00E-132	Identity = 60.66%
AB0162	1	traT gi 34557173 ref NP_906988.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-63	Identity = 53.10%
	2	gi 118475085 ref YP_891499.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-62	Identity = 60.98%
	3	gi 153952157 ref YP_001398078.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 4.00E-56	Identity = 57.39%
	4	gi 57242301 ref ZP_00370240.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-48	Identity = 51.95%
	5	gi 71559043 ref YP_271770.1	Salmonella enterica	E-value = 8.00E-21	Identity = 30.04%
AB0163	1	cdsA gi 152991408 ref YP_001357130.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-60	Identity = 52.46%
	2	gi 152991741 ref YP_001357462.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-54	Identity = 47.62%
	3	gi 34557211 ref NP_907026.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-52	Identity = 47.28%
	4	gi 78776326 ref YP_392641.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-51	Identity = 50.00%
	5	gi 32266022 ref NP_860054.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-45	Identity = 46.91%
AB0164	1	dxr gi 78776327 ref YP_392642.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-124	Identity = 63.64%
	2	gi 149195077 ref ZP_01872169.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-120	Identity = 63.43%
	3	gi 152991740 ref YP_001357461.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-114	Identity = 57.95%
	4	gi 34557210 ref NP_907025.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-102	Identity = 52.39%
	5	gi 152991407 ref YP_001357129.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-102	Identity = 54.21%
AB0165	1		<b>*** No matches found ***</b>		
AB0166	1	gi 78776345 ref YP_392660.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-36	Identity = 45.14%
	2	gi 152991739 ref YP_001357460.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-35	Identity = 46.63%
	3	gi 152991405 ref YP_001357127.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-35	Identity = 45.14%
	4	gi 134097949 ref YP_001103610.1	Saccharopolyspora erythraea NRRL 2338	E-value = 4.00E-19	Identity = 34.27%
	5	gi 29831465 ref NP_826099.1	Streptomyces avermitilis MA-4680	E-value = 7.00E-16	Identity = 30.68%
AB0167	1	gcp gi 78776332 ref YP_392647.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-118	Identity = 65.95%
	2	gi 152991404 ref YP_001357126.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-114	Identity = 63.89%
	3	gi 152991738 ref YP_001357459.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-111	Identity = 60.24%
	4	gi 149195384 ref ZP_01872469.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-109	Identity = 61.03%
	5	gi 34557921 ref NP_907736.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-101	Identity = 58.66%
AB0168	1	gi 78777706 ref YP_394021.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-11	Identity = 46.67%
	2	gi 149372843 ref ZP_01891864.1	unidentified eubacterium SCB49	E-value = 1.00E-05	Identity = 34.83%
AB0169	1	gi 149910686 ref ZP_01899322.1	Moritella sp. PE36	E-value = 2.00E-146	Identity = 58.94%
	2	gi 78776417 ref YP_392732.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-131	Identity = 52.92%
	3	gi 152989919 ref YP_001355641.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-126	Identity = 50.65%
	4	gi 149194663 ref ZP_01871758.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-121	Identity = 50.11%
	5	gi 152991753 ref YP_001357474.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-112	Identity = 46.30%
AB0170	1	gi 46199293 ref YP_004960.1	Thermus thermophilus HB27	E-value = 2.00E-16	Identity = 40.40%
	2	gi 21674425 ref NP_662490.1	Chlorobium tepidum TLS	E-value = 3.00E-16	Identity = 44.68%
	3	gi 55981325 ref YP_144622.1	Thermus thermophilus HB8	E-value = 4.00E-16	Identity = 39.39%

	4	gi 116750719 ref YP_847406.1	Syntrophobacter fumaroxidans MPOB	E-value = 5.00E-16	Identity = 37.37%
	5	gi 119773679 ref YP_926419.1	Shewanella amazonensis SB2B	E-value = 7.00E-16	Identity = 40.00%
AB0171	1	thiG gi 78776418 ref YP_392733.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-116	Identity = 83.78%
	2	gi 149194944 ref ZP_01872037.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-112	Identity = 80.69%
	3	gi 152989923 ref YP_001355645.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-110	Identity = 77.99%
	4	gi 34557342 ref NP_907157.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-105	Identity = 75.58%
	5	gi 32267350 ref NP_861382.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-104	Identity = 75.29%
AB0172	1	pycB1 gi 152991046 ref YP_001356768.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 72.49%
	2	gi 152993020 ref YP_001358741.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 72.41%
	3	gi 149194559 ref ZP_01871655.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 69.46%
	4	gi 154174885 ref YP_001407832.1	Campylobacter curvus 525.92	E-value = 0	Identity = 69.44%
	5	gi 157165713 ref YP_001466387.1	Campylobacter concisus 13826	E-value = 0	Identity = 69.46%
AB0173	1		<b>*** No matches found ***</b>		
AB0174	1	gi 78776820 ref YP_393135.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-115	Identity = 71.48%
	2	gi 34557184 ref NP_906999.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-75	Identity = 47.08%
	3	gi 28900255 ref NP_799910.1	Vibrio parahaemolyticus RIMD 2210633	E-value = 5.00E-41	Identity = 31.71%
	4	gi 156977683 ref YP_001448589.1	Vibrio harveyi ATCC BAA-1116	E-value = 8.00E-41	Identity = 31.36%
	5	gi 116187268 ref ZP_01477157.1	Vibrio sp. Ex25	E-value = 8.00E-41	Identity = 31.71%
AB0175	1	gi 78777566 ref YP_393881.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-114	Identity = 80.67%
	2	gi 83646426 ref YP_434861.1	Hahella chejuensis KCTC 2396	E-value = 1.00E-88	Identity = 62.04%
	3	gi 27366938 ref NP_762465.1	Vibrio vulnificus CMCP6	E-value = 2.00E-84	Identity = 64.47%
	4	gi 37676715 ref NP_937111.1	Vibrio vulnificus YJ016	E-value = 4.00E-84	Identity = 64.15%
	5	gi 117619777 ref YP_855810.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 2.00E-81	Identity = 61.32%
AB0176	1	gi 34558440 ref NP_908255.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-52	Identity = 28.73%
	2	gi 34558144 ref NP_907959.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-39	Identity = 28.07%
AB0177	1	gi 118443735 ref YP_878084.1	Clostridium novyi NT	E-value = 0	Identity = 51.98%
	2	gi 148380042 ref YP_001254583.1	Clostridium botulinum A str. ATCC 3502	E-value = 0	Identity = 50.38%
	3	gi 90412540 ref ZP_01220543.1	Photobacterium profundum 3TCK	E-value = 0	Identity = 44.85%
	4	gi 68055380 ref ZP_00539526.1	Exiguobacterium sibiricum 255-15	E-value = 2.00E-150	Identity = 36.03%
	5	gi 148642750 ref YP_001273263.1	Methanobrevibacter smithii ATCC 35061	E-value = 2.00E-150	Identity = 38.58%
AB0178	1	tkT gi 152991762 ref YP_001357483.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 65.34%
	2	gi 152990007 ref YP_001355729.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 63.34%
	3	gi 78776539 ref YP_392854.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 63.86%
	4	gi 118475100 ref YP_891279.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 64.74%
	5	gi 157165524 ref YP_001467680.1	Campylobacter concisus 13826	E-value = 0	Identity = 63.71%
AB0179	1	lrgA gi 110599991 ref ZP_01388221.1	Geobacter sp. FRC-32	E-value = 7.00E-12	Identity = 36.28%
	2	gi 91783125 ref YP_558331.1	Burkholderia xenovorans LB400	E-value = 1.00E-11	Identity = 40.37%
	3	gi 92113916 ref YP_573844.1	Chromohalobacter salexigens DSM 3043	E-value = 2.00E-11	Identity = 38.26%
	4	gi 144897729 emb CAM74593.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 3.00E-11	Identity = 45.92%
	5	gi 118743706 ref ZP_01591708.1	Geobacter lovleyi SZ	E-value = 1.00E-10	Identity = 37.14%
AB0180	1	lrgB gi 78222419 ref YP_384166.1	Geobacter metallireducens GS-15	E-value = 2.00E-42	Identity = 41.33%
	2	gi 78486277 ref YP_392202.1	Thiomicrospira crunogena XCL-2	E-value = 4.00E-40	Identity = 43.23%
	3	gi 71908719 ref YP_286306.1	Dechloromonas aromatica RCB	E-value = 5.00E-39	Identity = 43.12%
	4	gi 120555974 ref YP_960325.1	Marinobacter aquaeolei VT8	E-value = 5.00E-39	Identity = 38.70%
	5	gi 126669005 ref ZP_01739942.1	Marinobacter sp. ELB17	E-value = 7.00E-39	Identity = 38.05%
AB0181	1	gi 84319020 ref ZP_00967427.1	Pseudomonas aeruginosa C3719	E-value = 3.00E-23	Identity = 42.99%
	2	gi 15599359 ref NP_252853.1	Pseudomonas aeruginosa PAO1	E-value = 3.00E-23	Identity = 42.99%
	3	gi 49080280 gb AAT49999.1	synthetic construct [Pseudomonas aeruginosa]	E-value = 3.00E-23	Identity = 42.99%
	4	gi 114773707 ref ZP_01450738.1	alpha proteobacterium HTCC2255	E-value = 3.00E-18	Identity = 41.67%



	5	gi 22034319 gb AAL01561.1	Escherichia fergusonii	E-value = 4.00E-16	Identity = 44.23%
AB0183	1	gi 88795630 ref ZP_01111324.1	Alteromonas macleodii 'Deep ecotype'	E-value = 5.00E-17	Identity = 41.22%
	2	gi 109897546 ref YP_660801.1	Pseudoalteromonas atlantica T6c	E-value = 9.00E-17	Identity = 41.73%
	3	gi 90409818 ref ZP_01217835.1	Photobacterium profundum 3TCK	E-value = 6.00E-16	Identity = 40.94%
	4	gi 54301732 ref YP_131725.1	Photobacterium profundum SS9	E-value = 8.00E-16	Identity = 40.16%
	5	gi 114771451 ref ZP_01448866.1	alpha proteobacterium HTCC2255	E-value = 2.00E-15	Identity = 40.48%
AB0184	1	gi 34556831 ref NP_906646.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-153	Identity = 69.43%
	2	gi 118474683 ref YP_891627.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-140	Identity = 63.87%
	3	gi 118474592 ref YP_891628.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-139	Identity = 62.47%
	4	gi 154174743 ref YP_001407837.1	Campylobacter curvus 525.92	E-value = 3.00E-136	Identity = 63.29%
	5	gi 57168071 ref ZP_00367210.1	Campylobacter coli RM2228	E-value = 8.00E-130	Identity = 57.27%
AB0185	1	gi 152992756 ref YP_001358477.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-14	Identity = 28.77%
	2	gi 126208873 ref YP_001054098.1	Actinobacillus pleuropneumoniae L20	E-value = 6.00E-07	Identity = 25.98%
	3	gi 154174239 ref YP_001407562.1	Campylobacter curvus 525.92	E-value = 2.00E-06	Identity = 28.64%
AB0186	1		*** No matches found ***		
AB0187	1	gi 153217038 ref ZP_01950802.1	Vibrio cholerae 1587	E-value = 4.00E-44	Identity = 50.00%
	2	gi 150423018 gb EDN14967.1	Vibrio cholerae AM-19226	E-value = 4.00E-44	Identity = 50.00%
	3	gi 153826391 ref ZP_01979058.1	Vibrio cholerae MZO-2	E-value = 6.00E-44	Identity = 50.00%
	4	gi 153829252 ref ZP_01981919.1	Vibrio cholerae 623-39	E-value = 1.00E-43	Identity = 49.53%
	5	gi 116189753 ref ZP_01479500.1	Vibrio cholerae MO10	E-value = 3.00E-43	Identity = 49.07%
AB0188	1	gi 147673088 ref YP_001217468.1	Vibrio cholerae O395	E-value = 1.00E-100	Identity = 63.84%
	2	gi 153217034 ref ZP_01950798.1	Vibrio cholerae 1587	E-value = 1.00E-99	Identity = 64.36%
	3	gi 153826388 ref ZP_01979055.1	Vibrio cholerae MZO-2	E-value = 1.00E-99	Identity = 64.03%
	4	gi 116220560 ref ZP_01485989.1	Vibrio cholerae V51	E-value = 2.00E-99	Identity = 64.03%
	5	gi 15641938 ref NP_231570.1	Vibrio cholerae O1 biovar eltor str. N16961	E-value = 4.00E-99	Identity = 63.70%
AB0189	1	gi 87118984 ref ZP_01074882.1	Marinomonas sp. MED121	E-value = 3.00E-63	Identity = 55.94%
	2	gi 15641939 ref NP_231571.1	Vibrio cholerae O1 biovar eltor str. N16961	E-value = 3.00E-58	Identity = 58.70%
	3	gi 153217033 ref ZP_01950797.1	Vibrio cholerae 1587	E-value = 4.00E-58	Identity = 58.70%
	4	gi 153829243 ref ZP_01981910.1	Vibrio cholerae 623-39	E-value = 5.00E-58	Identity = 58.70%
	5	gi 153826397 ref ZP_01979064.1	Vibrio cholerae MZO-2	E-value = 7.00E-58	Identity = 58.15%
AB0190	1	gi 152992755 ref YP_001358476.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 44.34%
	2	gi 89092511 ref ZP_01165464.1	Oceanospirillum sp. MED92	E-value = 0	Identity = 43.46%
	3	gi 90023171 ref YP_528998.1	Saccharophagus degradans 2-40	E-value = 0	Identity = 44.26%
	4	gi 57240331 ref ZP_00368280.1	Campylobacter lari RM2100	E-value = 0	Identity = 41.1%
	5	gi 32265805 ref NP_859837.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 42.26%
AB0191	1	gi 152991173 ref YP_001356895.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 44.09%
	2	gi 152992133 ref YP_001357854.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 41.33%
	3	gi 78777679 ref YP_393994.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-169	Identity = 38.53%
	4	gi 149194245 ref ZP_01871342.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-157	Identity = 42.40%
	5	gi 34556479 ref NP_906294.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-152	Identity = 35.93%
AB0192	1	gi 78777591 ref YP_393906.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-32	Identity = 40.25%
	2	gi 34556947 ref NP_906762.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-27	Identity = 35.83%
	3	gi 152990239 ref YP_001355961.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-22	Identity = 33.60%
	4	gi 152993222 ref YP_001358943.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-19	Identity = 28.46%
	5	gi 149195054 ref ZP_01872146.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-11	Identity = 29.80%
AB0193	1	gi 78485116 ref YP_391041.1	Thiomicrospira crunogena XCL-2	E-value = 7.00E-48	Identity = 45.21%
	2	gi 149195055 ref ZP_01872147.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-39	Identity = 46.43%
	3	gi 78777654 ref YP_393969.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-22	Identity = 32.97%
	4	gi 154173756 ref YP_001407719.1	Campylobacter curvus 525.92	E-value = 7.00E-21	Identity = 29.59%

	5	gi 57506021 ref ZP_00371944.1	Campylobacter upsaliensis RM3195	E-value = 7.00E-20	Identity = 34.82%
AB0194	1	gi 123449116 ref XP_001313280.1	Trichomonas vaginalis G3	E-value = 5.00E-24	Identity = 26.13%
	2	gi 123471510 ref XP_001318954.1	Trichomonas vaginalis G3	E-value = 1.00E-21	Identity = 25.49%
	3	gi 123413741 ref XP_001304339.1	Trichomonas vaginalis G3	E-value = 3.00E-21	Identity = 25.33%
AB0195	1	gi 152990242 ref YP_001355964.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-39	Identity = 81.25%
	2	gi 78776841 ref YP_393156.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-39	Identity = 83.04%
	3	gi 149911060 ref ZP_01899688.1	Moritella sp. PE36	E-value = 6.00E-36	Identity = 71.43%
	4	gi 152991172 ref YP_001356894.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-36	Identity = 75.00%
	5	gi 114321697 ref YP_743380.1	Alkalilimnicola ehrlichei MLHE-1	E-value = 8.00E-36	Identity = 68.75%
AB0196	1	gi 152991986 ref YP_001357707.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-129	Identity = 66.96%
	2	gi 152991169 ref YP_001356891.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-118	Identity = 64.65%
	3	gi 78776823 ref YP_393138.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-112	Identity = 60.90%
	4	gi 57168382 ref ZP_00367516.1	Campylobacter coli RM2228	E-value = 2.00E-108	Identity = 59.76%
	5	gi 86151298 ref ZP_01069513.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 5.00E-108	Identity = 58.98%
AB0197	1	gi 157164910 ref YP_001467212.1	Campylobacter concisus 13826	E-value = 6.00E-61	Identity = 38.40%
	2	gi 118475490 ref YP_892646.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-60	Identity = 39.94%
	3	gi 154175307 ref YP_001408769.1	Campylobacter curvus 525.92	E-value = 5.00E-60	Identity = 38.11%
	4	gi 149194333 ref ZP_01871430.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-58	Identity = 38.31%
	5	gi 57168742 ref ZP_00367873.1	Campylobacter coli RM2228	E-value = 7.00E-57	Identity = 38.00%
AB0198	1	gi 32265641 ref NP_859673.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-63	Identity = 42.20%
	2	gi 15644874 ref NP_207044.1	Helicobacter pylori 26695	E-value = 9.00E-62	Identity = 41.79%
	3	gi 108562674 ref YP_626990.1	Helicobacter pylori HPAG1	E-value = 2.00E-61	Identity = 41.21%
	4	gi 109947877 ref YP_665105.1	Helicobacter acinonychis str. Sheeba	E-value = 7.00E-61	Identity = 40.23%
	5	gi 15611301 ref NP_222952.1	Helicobacter pylori J99	E-value = 2.00E-60	Identity = 39.77%
AB0199	1		*** No matches found ***		
AB0200	1	gi 149194202 ref ZP_01871300.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-08	Identity = 46.99%
	2	gi 118474914 ref YP_891408.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-07	Identity = 44.58%
	3	gi 17548595 ref NP_521935.1	Ralstonia solanacearum GMI1000	E-value = 2.00E-07	Identity = 34.67%
	4	gi 78778199 ref YP_394514.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-07	Identity = 41.46%
	5	gi 42524693 ref NP_970073.1	Bdellovibrio bacteriovorus HD100	E-value = 3.00E-07	Identity = 36.71%
AB0201	1		*** No matches found ***		
AB0202	1		*** No matches found ***		
AB0203	1	gi 157165347 ref YP_001466934.1	Campylobacter concisus 13826	E-value = 2.00E-09	Identity = 27.17%
	2	gi 117926843 ref YP_867460.1	Magnetococcus sp. MC-1	E-value = 2.00E-08	Identity = 29.11%
	3	gi 83720504 ref YP_440586.1	Burkholderia thailandensis E264	E-value = 3.00E-08	Identity = 30.23%
	4	gi 157376192 ref YP_001474792.1	Shewanella sediminis HAW-EB3	E-value = 1.00E-06	Identity = 26.35%
	5	gi 118072029 ref ZP_01540221.1	Shewanella woodyi ATCC 51908	E-value = 4.00E-06	Identity = 27.01%
AB0204	1		*** No matches found ***		
AB0205	1	gi 57242591 ref ZP_00370528.1	Campylobacter upsaliensis RM3195	E-value = 7.00E-34	Identity = 36.32%
	2	gi 78776932 ref YP_393247.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-34	Identity = 35.83%
	3	gi 154174210 ref YP_001408222.1	Campylobacter curvus 525.92	E-value = 1.00E-33	Identity = 36.71%
	4	gi 86153207 ref ZP_01071411.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 8.00E-33	Identity = 36.29%
	5	gi 121612803 ref YP_001000383.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 1.00E-32	Identity = 36.29%
AB0206	1		*** No matches found ***		
AB0207	1	gi 92114155 ref YP_574083.1	Chromohalobacter salexigens DSM 3043	E-value = 2.00E-14	Identity = 25.50%
	2	gi 113948270 ref ZP_01433931.1	Shewanella baltica OS195	E-value = 5.00E-14	Identity = 26.19%
	3	gi 153001459 ref YP_001367140.1	Shewanella baltica OS185	E-value = 6.00E-14	Identity = 26.19%
	4	gi 67154580 ref ZP_00416325.1	Azotobacter vinelandii AvOP	E-value = 1.00E-13	Identity = 26.37%
	5	gi 157161395 ref YP_001458713.1	Escherichia coli HS	E-value = 1.00E-13	Identity = 27.47%

AB0208	1	<i>fliS</i>	gi 149194067 ref ZP_01871165.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-21	Identity = 50.00%
	2		gi 34556599 ref NP_906414.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-20	Identity = 49.54%
	3		gi 154175496 ref YP_001408377.1	Campylobacter curvus 525.92	E-value = 6.00E-18	Identity = 47.12%
	4		gi 86151684 ref ZP_01069898.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 9.00E-18	Identity = 42.73%
	5		gi 109947240 ref YP_664468.1	Helicobacter acinonychis str. Sheeba	E-value = 9.00E-18	Identity = 45.87%
AB0209	1			<b>*** No matches found ***</b>		
AB0210	1	<i>tilS</i>	gi 152991221 ref YP_001356943.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-70	Identity = 50.64%
	2		gi 154175317 ref YP_001408589.1	Campylobacter curvus 525.92	E-value = 2.00E-69	Identity = 46.52%
	3		gi 152993772 ref YP_001359493.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-66	Identity = 48.15%
	4		gi 157165572 ref YP_001467030.1	Campylobacter concisus 13826	E-value = 3.00E-65	Identity = 46.42%
	5		gi 78777932 ref YP_394247.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-64	Identity = 46.15%
AB0211	1	<i>yliG</i>	gi 152993771 ref YP_001359492.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-160	Identity = 64.61%
	2		gi 78777931 ref YP_394246.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-156	Identity = 63.43%
	3		gi 152991220 ref YP_001356942.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-147	Identity = 60.46%
	4		gi 34558076 ref NP_907891.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-136	Identity = 57.67%
	5		gi 121613708 ref YP_001001103.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-134	Identity = 56.09%
AB0212	1	<i>panC</i>	gi 152991914 ref YP_001357635.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-89	Identity = 58.76%
	2		gi 152991275 ref YP_001356997.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-88	Identity = 58.61%
	3		gi 118474313 ref YP_892511.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-82	Identity = 56.04%
	4		gi 149194097 ref ZP_01871195.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-82	Identity = 58.74%
	5		gi 157165494 ref YP_001467028.1	Campylobacter concisus 13826	E-value = 6.00E-81	Identity = 54.95%
AB0213	1		gi 152991228 ref YP_001356950.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-98	Identity = 64.86%
	2		gi 78777943 ref YP_394258.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-95	Identity = 62.42%
	3		gi 39996534 ref NP_952485.1	Geobacter sulfurreducens PCA	E-value = 3.00E-66	Identity = 46.33%
	4		gi 78222449 ref YP_384196.1	Geobacter metallireducens GS-15	E-value = 1.00E-63	Identity = 43.13%
	5		gi 118580430 ref YP_901680.1	Pelobacter propionicus DSM 2379	E-value = 4.00E-61	Identity = 43.79%
AB0214	1	<i>acpS</i>	gi 15792727 ref NP_282550.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-26	Identity = 54.87%
	2		gi 153951701 ref YP_001398710.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-25	Identity = 53.98%
	3		gi 34558259 ref NP_908074.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-25	Identity = 54.05%
	4		gi 57238446 ref YP_179577.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-25	Identity = 53.98%
	5		gi 157415642 ref YP_001482898.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-25	Identity = 53.98%
AB0215	1	<i>gltS</i>	gi 50084018 ref YP_045528.1	Acinetobacter sp. ADP1	E-value = 4.00E-154	Identity = 76.34%
	2		gi 126642266 ref YP_001085250.1	Acinetobacter baumannii ATCC 17978	E-value = 2.00E-125	Identity = 76.11%
	3		gi 118051817 ref ZP_01520365.1	Comamonas testosteroni KF-1	E-value = 7.00E-125	Identity = 63.02%
	4		gi 121633963 ref YP_974208.1	Neisseria meningitidis FAM18	E-value = 1.00E-124	Identity = 62.59%
	5		gi 15676017 ref NP_273147.1	Neisseria meningitidis MC58	E-value = 1.00E-124	Identity = 62.34%
AB0216	1		gi 152992044 ref YP_001357765.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-39	Identity = 65.87%
	2		gi 152990631 ref YP_001356353.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-34	Identity = 58.87%
	3		gi 78776727 ref YP_393042.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-28	Identity = 50.39%
	4		gi 149193947 ref ZP_01871045.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-28	Identity = 54.10%
	5		gi 154174481 ref YP_001408003.1	Campylobacter curvus 525.92	E-value = 1.00E-22	Identity = 49.60%
AB0217	1	<i>metF</i>	gi 152991052 ref YP_001356774.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-106	Identity = 61.06%
	2		gi 78777863 ref YP_394178.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-103	Identity = 62.58%
	3		gi 149195267 ref ZP_01872356.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-91	Identity = 60.07%
	4		gi 34557786 ref NP_907601.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-82	Identity = 49.67%
	5		gi 152992236 ref YP_001357957.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-81	Identity = 51.97%
AB0218	1	<i>serB</i>	gi 78777862 ref YP_394177.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-75	Identity = 72.33%
	2		gi 149194448 ref ZP_01871545.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-72	Identity = 72.82%
	3		gi 152991051 ref YP_001356773.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-72	Identity = 70.05%

	4	gi 152992237 ref YP_001357958.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-67	Identity = 65.37%
	5	gi 34558365 ref NP_908180.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-63	Identity = 63.11%
AB0219	1	gi 34558364 ref NP_908179.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-89	Identity = 52.62%
	2	gi 152993640 ref YP_001359361.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-87	Identity = 52.13%
	3	gi 78776665 ref YP_392980.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-82	Identity = 50.62%
	4	gi 152990131 ref YP_001355853.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-78	Identity = 50.15%
	5	gi 82523962 emb CAI78773.1	uncultured epsilon proteobacterium	E-value = 5.00E-77	Identity = 48.46%
AB0220	1	gi 152992062 ref YP_001357783.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 70.18%
	2	gi 152990928 ref YP_001356650.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 67.86%
	3	gi 66046851 ref YP_236692.1	Pseudomonas syringae pv. syringae B728a	E-value = 0	Identity = 65.77%
	4	gi 70731605 ref YP_261346.1	Pseudomonas fluorescens Pf-5	E-value = 0	Identity = 66.22%
	5	gi 119945429 ref YP_943109.1	Psychromonas ingrahamii 37	E-value = 0	Identity = 68.15%
AB0221	1	gi 116053864 ref YP_788301.1	Pseudomonas aeruginosa UCBPP-PA14	E-value = 8.00E-73	Identity = 52.90%
	2	gi 83643131 ref YP_431566.1	Hahella chejuensis KCTC 2396	E-value = 5.00E-70	Identity = 56.40%
	3	gi 92112245 ref YP_572173.1	Chromohalobacter salexigens DSM 3043	E-value = 1.00E-52	Identity = 44.05%
	4	gi 42522254 ref NP_967634.1	Bdellovibrio bacteriovorus HD100	E-value = 3.00E-44	Identity = 39.71%
	5	gi 150423936 gb EDN15876.1	Vibrio cholerae AM-19226	E-value = 3.00E-42	Identity = 40.24%
AB0222	1	gi 153094431 gb EDN75279.1	Mannheimia haemolytica PHL213	E-value = 0	Identity = 67.11%
	2	gi 86150507 ref ZP_01068732.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 0	Identity = 67.23%
	3	gi 153951579 ref YP_001397840.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 0	Identity = 67.23%
	4	gi 157415308 ref YP_001482564.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 0	Identity = 67.23%
	5	gi 148265621 ref YP_001232327.1	Geobacter uraniumreducens Rf4	E-value = 0	Identity = 55.95%
AB0225	1	gi 152990793 ref YP_001356515.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-29	Identity = 60.18%
	2	gi 149194797 ref ZP_01871891.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-25	Identity = 56.25%
	3	gi 152992082 ref YP_001357803.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-24	Identity = 48.67%
	4	gi 34557679 ref NP_907494.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-22	Identity = 46.90%
	5	gi 32267261 ref NP_861293.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-14	Identity = 38.18%
AB0226	1	gi 34556977 ref NP_906792.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-21	Identity = 57.29%
	2	gi 118474805 ref YP_892304.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-18	Identity = 54.17%
	3	gi 57168537 ref ZP_00367670.1	Campylobacter coli RM2228	E-value = 6.00E-17	Identity = 52.08%
	4	gi 152992083 ref YP_001357804.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-16	Identity = 44.79%
	5	gi 157164525 ref YP_001467458.1	Campylobacter concisus 13826	E-value = 3.00E-15	Identity = 51.04%
AB0227	1	gi 152992601 ref YP_001358322.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-162	Identity = 71.93%
	2	gi 78777105 ref YP_393420.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-162	Identity = 72.31%
	3	gi 118474179 ref YP_892148.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-158	Identity = 71.58%
	4	gi 57241059 ref ZP_00369006.1	Campylobacter lari RM2100	E-value = 2.00E-157	Identity = 71.58%
	5	gi 152990829 ref YP_001356551.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-155	Identity = 70.16%
AB0228	1	gi 34557851 ref NP_907666.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-86	Identity = 37.66%
	2	gi 78777217 ref YP_393532.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-81	Identity = 36.48%
	3	gi 152990828 ref YP_001356550.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-80	Identity = 37.05%
	4	gi 154173666 ref YP_001408232.1	Campylobacter curvus 525.92	E-value = 5.00E-67	Identity = 35.69%
	5	gi 152992602 ref YP_001358323.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-67	Identity = 34.17%
AB0229	1	gi 152991013 ref YP_001356735.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-135	Identity = 66.85%
	2	gi 78776958 ref YP_393273.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-129	Identity = 66.84%
	3	gi 152992004 ref YP_001357725.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-128	Identity = 61.08%
	4	gi 34557822 ref NP_907637.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-123	Identity = 56.76%
	5	gi 149193792 ref ZP_01870890.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-117	Identity = 62.13%
AB0230	1	gi 152991010 ref YP_001356732.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-18	Identity = 34.05%
	2	gi 152992005 ref YP_001357726.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-10	Identity = 28.80%

AB0231	1	<i>murC</i>	gi 152991009 ref YP_001356731.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-141	Identity = 60.46%
	2		gi 149193790 ref ZP_01870888.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-124	Identity = 57.24%
	3		gi 78776956 ref YP_393271.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-124	Identity = 54.82%
	4		gi 154175070 ref YP_001407775.1	Campylobacter curvus 525.92	E-value = 4.00E-124	Identity = 55.43%
	5		gi 34557823 ref NP_907638.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-116	Identity = 52.87%
AB0232	1	<i>dprA</i>	gi 78777855 ref YP_394170.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-76	Identity = 55.69%
	2		gi 152992041 ref YP_001357762.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-70	Identity = 51.94%
	3		gi 152990902 ref YP_001356624.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-62	Identity = 53.65%
	4		gi 148926621 ref ZP_01810302.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 5.00E-47	Identity = 44.73%
	5		gi 57236947 ref YP_178748.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 6.00E-47	Identity = 44.73%
AB0233	1		gi 78777856 ref YP_394171.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-47	Identity = 36.99%
	2		gi 154148192 ref YP_001405976.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-38	Identity = 33.71%
	3		gi 86151591 ref ZP_01069805.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-37	Identity = 34.35%
	4		gi 121613073 ref YP_001000334.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 9.00E-37	Identity = 32.96%
	5		gi 88597070 ref ZP_01100306.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 1.00E-36	Identity = 34.42%
AB0234	1	<i>ilvC</i>	gi 78776740 ref YP_393055.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-160	Identity = 81.47%
	2		gi 152992039 ref YP_001357760.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-156	Identity = 81.07%
	3		gi 149193941 ref ZP_01871039.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-149	Identity = 78.57%
	4		gi 152990905 ref YP_001356627.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-148	Identity = 76.18%
	5		gi 154174694 ref YP_001408000.1	Campylobacter curvus 525.92	E-value = 3.00E-148	Identity = 76.47%
AB0235	1	<i>rmr</i>	gi 152990906 ref YP_001356628.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-107	Identity = 40.81%
	2		gi 78776742 ref YP_393057.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-104	Identity = 37.79%
	3		gi 152992027 ref YP_001357748.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-104	Identity = 40.26%
	4		gi 34558170 ref NP_907985.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-97	Identity = 39.26%
	5		gi 118474787 ref YP_892287.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-95	Identity = 37.81%
AB0236	1		gi 78776613 ref YP_392928.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-06	Identity = 28.83%
AB0237	1		gi 78776741 ref YP_393056.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-53	Identity = 40.50%
	2		gi 152990907 ref YP_001356629.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-40	Identity = 36.90%
	3		gi 152992026 ref YP_001357747.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-39	Identity = 31.46%
	4		gi 34558169 ref NP_907984.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-33	Identity = 30.86%
	5		gi 118475683 ref YP_892288.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-31	Identity = 32.09%
AB0238	1	<i>rpsF</i>	gi 34558168 ref NP_907983.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-28	Identity = 58.41%
	2		gi 109946866 ref YP_664094.1	Helicobacter acinonychis str. Sheeba	E-value = 9.00E-26	Identity = 56.14%
	3		gi 32266035 ref NP_860067.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-25	Identity = 58.04%
	4		gi 108563614 ref YP_627930.1	Helicobacter pylori HPAG1	E-value = 4.00E-25	Identity = 55.26%
	5		gi 15645860 ref NP_208038.1	Helicobacter pylori 26695	E-value = 5.00E-25	Identity = 55.26%
AB0239	1	<i>ssb</i>	gi 34558167 ref NP_907982.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-42	Identity = 56.47%
	2		gi 152992023 ref YP_001357744.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-41	Identity = 56.98%
	3		gi 152990909 ref YP_001356631.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-40	Identity = 55.29%
	4		gi 32266036 ref NP_860068.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-37	Identity = 48.28%
	5		gi 78777858 ref YP_394173.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-35	Identity = 49.71%
AB0240	1	<i>rpsR</i>	gi 157164150 ref YP_001467166.1	Campylobacter concisus 13826	E-value = 3.00E-22	Identity = 69.88%
	2		gi 57240364 ref ZP_00368313.1	Campylobacter lari RM2100	E-value = 4.00E-22	Identity = 71.08%
	3		gi 118475552 ref YP_892291.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-22	Identity = 72.29%
	4		gi 154174830 ref YP_001407994.1	Campylobacter curvus 525.92	E-value = 8.00E-22	Identity = 69.88%
	5		gi 57242167 ref ZP_00370107.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-21	Identity = 69.88%
AB0241	1			*** No matches found ***		
AB0242	1	<i>cysS</i>	gi 152990845 ref YP_001356567.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-167	Identity = 64.01%
	2		gi 152992414 ref YP_001358135.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-162	Identity = 63.44%

	3	gi 149194602 ref ZP_01871698.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-160	Identity = 64.81%
	4	gi 34556870 ref NP_906685.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-151	Identity = 58.28%
	5	gi 154175222 ref YP_001408206.1	Campylobacter curvus 525.92	E-value = 5.00E-150	Identity = 56.68%
AB0243	1	gi 152991227 ref YP_001356949.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-97	Identity = 55.00%
	2	gi 34558085 ref NP_907900.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-91	Identity = 51.15%
	3	gi 157165500 ref YP_001467013.1	Campylobacter concisus 13826	E-value = 9.00E-90	Identity = 54.22%
	4	gi 154175154 ref YP_001408581.1	Campylobacter curvus 525.92	E-value = 1.00E-89	Identity = 52.31%
	5	gi 78777942 ref YP_394257.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-89	Identity = 49.49%
AB0244	1	gi 118475003 ref YP_892519.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-18	Identity = 63.75%
	2	gi 154173644 ref YP_001408582.1	Campylobacter curvus 525.92	E-value = 1.00E-17	Identity = 62.50%
	3	gi 86153745 ref ZP_01071948.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 7.00E-17	Identity = 58.75%
	4	gi 57168595 ref ZP_00367728.1	Campylobacter coli RM2228	E-value = 1.00E-16	Identity = 58.75%
	5	gi 57242308 ref ZP_00370247.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-16	Identity = 61.25%
AB0245	1	gi 152991225 ref YP_001356947.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-157	Identity = 63.57%
	2	gi 78777940 ref YP_394255.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-149	Identity = 60.46%
	3	gi 86148942 ref ZP_01067174.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 2.00E-143	Identity = 57.97%
	4	gi 86153933 ref ZP_01072136.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 3.00E-143	Identity = 57.97%
	5	gi 15791822 ref NP_281645.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-143	Identity = 57.74%
AB0246	1	gi 78777939 ref YP_394254.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-51	Identity = 47.26%
	2	gi 152991224 ref YP_001356946.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-47	Identity = 45.88%
	3	gi 34558082 ref NP_907897.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-45	Identity = 45.60%
	4	gi 154173622 ref YP_001408584.1	Campylobacter curvus 525.92	E-value = 1.00E-42	Identity = 44.28%
	5	gi 152993774 ref YP_001359495.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-42	Identity = 42.57%
AB0247	1		<b>*** No matches found ***</b>		
AB0248	1	gi 152990397 ref YP_001356119.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-152	Identity = 71.95%
	2	gi 152992134 ref YP_001357855.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-146	Identity = 70.74%
	3	gi 78777672 ref YP_393987.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-145	Identity = 67.71%
	4	gi 157164970 ref YP_001466574.1	Campylobacter concisus 13826	E-value = 2.00E-142	Identity = 67.42%
	5	gi 121613371 ref YP_001001026.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-139	Identity = 67.90%
AB0249	1		<b>*** No matches found ***</b>		
AB0250	1	gi 152990078 ref YP_001355800.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-63	Identity = 55.24%
	2	gi 78776363 ref YP_392678.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-63	Identity = 51.89%
	3	gi 152991985 ref YP_001357706.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-61	Identity = 52.45%
	4	gi 152990058 ref YP_001355780.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-59	Identity = 52.71%
	5	gi 46446692 ref YP_008057.1	Candidatus Protochlamydia amoebophila UWE25	E-value = 1.00E-56	Identity = 47.20%
AB0251	1	gi 152991945 ref YP_001357666.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-107	Identity = 55.83%
	2	gi 78778088 ref YP_394403.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-102	Identity = 55.06%
	3	gi 34558333 ref NP_908148.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-93	Identity = 50.83%
	4	gi 152991265 ref YP_001356987.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-92	Identity = 53.33%
	5	gi 108563003 ref YP_627319.1	Helicobacter pylori HPAG1	E-value = 1.00E-84	Identity = 46.32%
AB0252	1	gi 78778095 ref YP_394410.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-19	Identity = 50.91%
	2	gi 152991827 ref YP_001357548.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-16	Identity = 41.90%
	3	gi 32267250 ref NP_861282.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-15	Identity = 43.12%
	4	gi 34556878 ref NP_906693.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-15	Identity = 40.91%
	5	gi 109947298 ref YP_664526.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-14	Identity = 47.66%
AB0253	1	gi 34558371 ref NP_908186.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-12	Identity = 58.46%
	2	gi 152990806 ref YP_001356528.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-12	Identity = 59.09%
	3	gi 78777036 ref YP_393351.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-09	Identity = 54.55%
	4	gi 149193982 ref ZP_01871080.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-07	Identity = 53.03%

	5	gi 32266189 ref NP_860221.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-07	Identity = 42.19%
AB0254	1	gi 83857307 ref ZP_00950835.1	Croceibacter atlanticus HTCC2559	E-value = 1.00E-20	Identity = 36.17%
	2	gi 56476024 ref YP_157613.1	Azoarcus sp. EbN1	E-value = 2.00E-20	Identity = 33.78%
	3	gi 146276251 ref YP_001166410.1	Rhodobacter sphaeroides ATCC 17025	E-value = 3.00E-20	Identity = 33.67%
	4	gi 77464614 ref YP_354118.1	Rhodobacter sphaeroides 2.4.1	E-value = 2.00E-19	Identity = 33.17%
	5	gi 69938372 ref ZP_00632850.1	Paracoccus denitrificans PD1222	E-value = 3.00E-19	Identity = 36.08%
AB0255	1	gi 123420152 ref XP_001305702.1	Trichomonas vaginalis G3	E-value = 9.00E-142	Identity = 55.56%
	2	gi 118475613 ref YP_891806.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-141	Identity = 55.23%
	3	gi 152992032 ref YP_001357753.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-139	Identity = 54.60%
	4	gi 57506237 ref ZP_00372155.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-136	Identity = 53.44%
	5	gi 86151403 ref ZP_01069618.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-134	Identity = 54.07%
AB0256	1	gi 152992186 ref YP_001357907.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-145	Identity = 66.16%
	2	gi 34558829 gb AAQ75173.1	Alvinella pompejana epibiont 7G3	E-value = 1.00E-142	Identity = 63.36%
	3	gi 152990810 ref YP_001356532.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-137	Identity = 63.20%
	4	gi 78777452 ref YP_393767.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-132	Identity = 61.27%
	5	gi 34556738 ref NP_906553.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-126	Identity = 59.18%
AB0257	1	gi 118580480 ref YP_901730.1	Pelobacter propionicus DSM 2379	E-value = 0	Identity = 46.33%
	2	gi 118746541 ref ZP_01594476.1	Geobacter lovleyi SZ	E-value = 0	Identity = 46.95%
	3	gi 53804113 ref YP_114244.1	Methylococcus capsulatus str. Bath	E-value = 1.00E-134	Identity = 36.36%
	4	gi 91227908 ref ZP_01262047.1	Vibrio alginolyticus 12G01	E-value = 3.00E-133	Identity = 36.28%
	5	gi 118589292 ref ZP_01546698.1	Stappia aggregata IAM 12614	E-value = 7.00E-131	Identity = 37.00%
AB0258	1	gi 57240463 ref ZP_00368412.1	Campylobacter lari RM2100	E-value = 2.00E-102	Identity = 60.41%
	2	gi 152990125 ref YP_001355847.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-98	Identity = 61.30%
	3	gi 86150962 ref ZP_01069178.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-97	Identity = 57.82%
	4	gi 157415359 ref YP_001482615.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-97	Identity = 58.50%
	5	gi 86152461 ref ZP_01070666.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 4.00E-97	Identity = 58.50%
AB0259	1	gi 152993646 ref YP_001359367.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-86	Identity = 54.49%
	2	gi 82523959 emb CAI78770.1	uncultured epsilon proteobacterium	E-value = 5.00E-81	Identity = 53.53%
	3	gi 152990124 ref YP_001355846.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-79	Identity = 54.28%
	4	gi 78776663 ref YP_392978.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-77	Identity = 51.60%
	5	gi 124006609 ref ZP_01691441.1	Microscilla marina ATCC 23134	E-value = 5.00E-73	Identity = 46.63%
AB0260	1	gi 156976003 ref YP_001446909.1	Vibrio harveyi ATCC BAA-1116	E-value = 3.00E-50	Identity = 52.72%
	2	gi 153832648 ref ZP_01985315.1	Vibrio harveyi HY01	E-value = 9.00E-50	Identity = 52.17%
	3	gi 148975786 ref ZP_01812617.1	Vibrionales bacterium SWAT-3	E-value = 7.00E-47	Identity = 51.09%
	4	gi 84387500 ref ZP_00990518.1	Vibrio splendidus 12B01	E-value = 1.00E-46	Identity = 52.20%
	5	gi 86145695 ref ZP_01064024.1	Vibrio sp. MED222	E-value = 2.00E-46	Identity = 51.10%
AB0261	1	gi 57238514 ref YP_179645.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-17	Identity = 30.49%
	2	gi 153951036 ref YP_001398791.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-17	Identity = 29.28%
	3	gi 86152014 ref ZP_01070227.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-17	Identity = 29.28%
	4	gi 86152639 ref ZP_01070844.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 4.00E-17	Identity = 29.28%
	5	gi 154175183 ref YP_001407477.1	Campylobacter curvus 525.92	E-value = 5.00E-17	Identity = 31.51%
AB0262	1	gi 78776635 ref YP_392950.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-36	Identity = 47.62%
	2	gi 152991212 ref YP_001356934.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-30	Identity = 40.63%
	3	gi 53713529 ref YP_099521.1	Bacteroides fragilis YCH46	E-value = 1.00E-29	Identity = 38.50%
	4	gi 60681814 ref YP_211958.1	Bacteroides fragilis NCTC 9343	E-value = 2.00E-29	Identity = 38.50%
	5	gi 118475768 ref YP_892260.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-29	Identity = 44.50%
AB0263	1	gi 78485453 ref YP_391378.1	Thiomicrospira crunogena XCL-2	E-value = 6.00E-59	Identity = 61.38%
	2	gi 119468124 ref ZP_01611250.1	Alteromonadales bacterium TW-7	E-value = 4.00E-56	Identity = 59.26%
	3	gi 124006643 ref ZP_01691475.1	Microscilla marina ATCC 23134	E-value = 2.00E-55	Identity = 60.10%

	4	gi 78776220 ref YP_392535.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-55	Identity = 61.08%
	5	gi 119945955 ref YP_943635.1	Psychromonas ingrahamii 37	E-value = 7.00E-55	Identity = 56.02%
AB0264	1	gi 90021186 ref YP_527013.1	Saccharophagus degradans 2-40	E-value = 2.00E-49	Identity = 60.74%
	2	gi 123443885 ref YP_001007856.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 2.00E-49	Identity = 60.98%
	3	gi 77971985 ref ZP_00827578.1	Yersinia frederiksenii ATCC 33641	E-value = 2.00E-49	Identity = 60.37%
	4	gi 77976519 ref ZP_00832004.1	Yersinia intermedia ATCC 29909	E-value = 9.00E-49	Identity = 59.76%
	5	gi 148262333 ref YP_001229039.1	Geobacter uraniumreducens Rf4	E-value = 2.00E-48	Identity = 59.15%
AB0265	1	gi 123441619 ref YP_001005604.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 2.00E-62	Identity = 56.07%
	2	gi 77979078 ref ZP_00834499.1	Yersinia intermedia ATCC 29909	E-value = 4.00E-62	Identity = 55.65%
	3	gi 77960622 ref ZP_00824485.1	Yersinia mollaretii ATCC 43969	E-value = 4.00E-62	Identity = 56.07%
	4	gi 77956335 ref ZP_00820444.1	Yersinia bercovieri ATCC 43970	E-value = 8.00E-62	Identity = 55.23%
	5	gi 77975537 ref ZP_00831072.1	Yersinia frederiksenii ATCC 33641	E-value = 8.00E-62	Identity = 54.81%
AB0266	1	gi 51245076 ref YP_064960.1	Desulfotalea psychrophila LSv54	E-value = 3.00E-46	Identity = 60.53%
	2	gi 117923778 ref YP_864395.1	Magnetococcus sp. MC-1	E-value = 3.00E-44	Identity = 52.57%
	3	gi 110638398 ref YP_678607.1	Cytophaga hutchinsonii ATCC 33406	E-value = 6.00E-44	Identity = 53.80%
	4	gi 149275807 ref ZP_01881952.1	Pedobacter sp. BAL39	E-value = 4.00E-42	Identity = 52.33%
	5	gi 46581653 ref YP_012461.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 1.00E-40	Identity = 50.66%
AB0267	1		<b>*** No matches found ***</b>		
AB0268	1	gi 118474966 ref YP_891706.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-62	Identity = 37.40%
	2	gi 57240322 ref ZP_00368271.1	Campylobacter lari RM2100	E-value = 6.00E-59	Identity = 36.17%
	3	gi 86151675 ref ZP_01069889.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-55	Identity = 35.19%
	4	gi 157414880 ref YP_001482136.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 2.00E-55	Identity = 35.19%
	5	gi 86153513 ref ZP_01071717.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-55	Identity = 35.19%
AB0269	1	gi 118474222 ref YP_891707.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-49	Identity = 44.24%
	2	gi 157164388 ref YP_001467102.1	Campylobacter concisus 13826	E-value = 1.00E-48	Identity = 42.42%
	3	gi 154148493 ref YP_001406772.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-48	Identity = 40.48%
	4	gi 57168163 ref ZP_00367302.1	Campylobacter coli RM2228	E-value = 2.00E-44	Identity = 40.81%
	5	gi 57505872 ref ZP_00371797.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-44	Identity = 43.20%
AB0270	1		<b>*** No matches found ***</b>		
AB0271	1	gi 152989878 ref YP_001355600.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-98	Identity = 59.09%
	2	gi 125972798 ref YP_001036708.1	Clostridium thermocellum ATCC 27405	E-value = 3.00E-94	Identity = 56.73%
	3	gi 118474629 ref YP_892790.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-89	Identity = 57.56%
	4	gi 78776235 ref YP_392550.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-87	Identity = 54.05%
	5	gi 154148917 ref YP_001405667.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-87	Identity = 55.16%
AB0272	1	gi 32265894 ref NP_859926.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-69	Identity = 42.35%
	2	gi 57168398 ref ZP_00367532.1	Campylobacter coli RM2228	E-value = 1.00E-64	Identity = 42.67%
AB0273	1	<i>prpB</i> gi 57168400 ref ZP_00367534.1	Campylobacter coli RM2228	E-value = 1.00E-111	Identity = 70.34%
	2	gi 56460535 ref YP_155816.1	Idiomarina loihiensis L2TR	E-value = 1.00E-111	Identity = 69.42%
	3	gi 32265896 ref NP_859928.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-110	Identity = 68.26%
	4	gi 85711677 ref ZP_01042734.1	Idiomarina baltica OS145	E-value = 4.00E-110	Identity = 68.38%
	5	gi 127512748 ref YP_001093945.1	Shewanella loihiica PV-4	E-value = 9.00E-110	Identity = 68.26%
AB0274	1	<i>prpC</i> gi 67153418 ref ZP_00415163.1	Azotobacter vinelandii AvOP	E-value = 8.00E-174	Identity = 74.47%
	2	gi 146307109 ref YP_001187574.1	Pseudomonas mendocina ymp	E-value = 5.00E-172	Identity = 73.82%
	3	gi 21230490 ref NP_636407.1	Xanthomonas campestris pv. campestris str. ATCC 33913	E-value = 8.00E-169	Identity = 73.07%
	4	gi 149926179 ref ZP_01914441.1	Limnobacter sp. MED105	E-value = 9.00E-169	Identity = 73.16%
	5	gi 58580516 ref YP_199532.1	Xanthomonas oryzae pv. oryzae KACC10331	E-value = 6.00E-168	Identity = 72.53%
AB0275	1	<i>acnD</i> gi 114321750 ref YP_743433.1	Alkalilimnicola ehrlichei MLHE-1	E-value = 0	Identity = 68.56%
	2	gi 94500802 ref ZP_01307331.1	Oceanobacter sp. RED65	E-value = 0	Identity = 69.77%
	3	gi 127512750 ref YP_001093947.1	Shewanella loihiica PV-4	E-value = 0	Identity = 69.53%



	4	gi 148548642 ref YP_001268744.1	Pseudomonas putida F1	E-value = 0	Identity = 69.37%
	5	gi 26989060 ref NP_744485.1	Pseudomonas putida KT2440	E-value = 0	Identity = 69.42%
AB0276	1	<i>prpF</i> gi 146307111 ref YP_001187576.1	Pseudomonas mendocina ymp	E-value = 2.00E-149	Identity = 66.41%
	2	gi 146282397 ref YP_001172550.1	Pseudomonas stutzeri A1501	E-value = 8.00E-144	Identity = 63.61%
	3	gi 89093303 ref ZP_01166253.1	Oceanospirillum sp. MED92	E-value = 2.00E-141	Identity = 64.87%
	4	gi 120554583 ref YP_958934.1	Marinobacter aquaeolei VT8	E-value = 8.00E-141	Identity = 64.36%
	5	gi 156974676 ref YP_001445583.1	Vibrio harveyi ATCC BAA-1116	E-value = 1.00E-140	Identity = 63.85%
AB0277	1		*** No matches found ***		
AB0278	1	gi 71066487 ref YP_265214.1	Psychrobacter arcticus 273-4	E-value = 1.00E-42	Identity = 48.62%
	2	gi 93007049 ref YP_581486.1	Psychrobacter cryohalolentis K5	E-value = 1.00E-41	Identity = 47.51%
	3	gi 148653894 ref YP_001280987.1	Psychrobacter sp. PRwf-1	E-value = 4.00E-37	Identity = 46.41%
	4	gi 78188151 ref YP_378489.1	Chlorobium chlorochromatii CaD3	E-value = 2.00E-34	Identity = 43.68%
	5	gi 67917902 ref ZP_00511505.1	Chlorobium limicola DSM 245	E-value = 4.00E-32	Identity = 40.45%
AB0279	1		*** No matches found ***		
AB0280	1	<i>hemC</i> gi 78777061 ref YP_393376.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-93	Identity = 58.31%
	2	gi 152990765 ref YP_001356487.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-92	Identity = 58.39%
	3	gi 57241238 ref ZP_00369185.1	Campylobacter lari RM2100	E-value = 4.00E-89	Identity = 56.35%
	4	gi 154174368 ref YP_001408386.1	Campylobacter curvus 525.92	E-value = 2.00E-88	Identity = 54.84%
	5	gi 154148130 ref YP_001406461.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-87	Identity = 56.45%
AB0281	1	gi 152992230 ref YP_001357951.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-42	Identity = 36.46%
	2	gi 152990766 ref YP_001356488.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-41	Identity = 37.87%
	3	gi 78777060 ref YP_393375.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-35	Identity = 37.60%
	4	gi 157415617 ref YP_001482873.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 1.00E-06	Identity = 29.79%
	5	gi 91776495 ref YP_546251.1	Methylobacillus flagellatus KT	E-value = 7.00E-06	Identity = 25.79%
AB0282	1	<i>dnaX</i> gi 152993623 ref YP_001359344.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-131	Identity = 46.28%
	2	gi 7877754 ref YP_394069.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-118	Identity = 51.02%
	3	gi 15645339 ref NP_207511.1	Helicobacter pylori 26695	E-value = 2.00E-103	Identity = 42.39%
AB0283	1	<i>murl</i> gi 152993509 ref YP_001359230.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-79	Identity = 58.23%
	2	gi 124266488 ref YP_001020492.1	Methylibium petroleiphilum PM1	E-value = 3.00E-51	Identity = 43.52%
	3	gi 152980748 ref YP_001352569.1	Janthinobacterium sp. Marseille	E-value = 5.00E-48	Identity = 42.22%
	4	gi 146283506 ref YP_001173659.1	Pseudomonas stutzeri A1501	E-value = 8.00E-48	Identity = 42.73%
	5	gi 134094154 ref YP_001099229.1	Herminiimonas arsenicoxydans	E-value = 3.00E-47	Identity = 42.67%
AB0284	1	<i>gdhA</i> gi 78777707 ref YP_394022.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 79.11%
	2	gi 109896617 ref YP_659872.1	Pseudoalteromonas atlantica T6c	E-value = 0	Identity = 68.67%
	3	gi 152995919 ref YP_001340754.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 69.11%
	4	gi 34558218 ref NP_908033.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 68.37%
	5	gi 77360335 ref YP_339910.1	Pseudoalteromonas haloplanktis TAC125	E-value = 2.00E-180	Identity = 69.33%
AB0285	1	<i>rho</i> gi 152991197 ref YP_001356919.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 76.43%
	2	gi 34557208 ref NP_907023.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 76.81%
	3	gi 154173724 ref YP_001408571.1	Campylobacter curvus 525.92	E-value = 0	Identity = 73.46%
	4	gi 152993510 ref YP_001359231.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-180	Identity = 74.24%
	5	gi 157165083 ref YP_001467008.1	Campylobacter concisus 13826	E-value = 1.00E-179	Identity = 72.11%
AB0286	1	<i>tsaA</i> gi 152992346 ref YP_001358067.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-91	Identity = 80.81%
	2	gi 78777972 ref YP_394287.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-90	Identity = 78.28%
	3	gi 34558282 ref NP_908097.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-88	Identity = 76.77%
	4	gi 57241472 ref ZP_00369418.1	Campylobacter lari RM2100	E-value = 5.00E-86	Identity = 76.26%
	5	gi 152990141 ref YP_001355863.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-86	Identity = 75.38%
AB0287	1	<i>fdxA</i> gi 152993630 ref YP_001359351.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-22	Identity = 71.11%
	2	gi 149194084 ref ZP_01871182.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-22	Identity = 72.22%

	3	gi 118475634 ref YP_891436.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-21	Identity = 73.75%
	4	gi 32266145 ref NP_860177.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-21	Identity = 74.67%
	5	gi 57168471 ref ZP_00367605.1	Campylobacter coli RM2228	E-value = 5.00E-21	Identity = 69.88%
AB0288	1 <i>ndk</i>	gi 32266176 ref NP_860208.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-55	Identity = 81.75%
	2	gi 157163948 ref YP_001466313.1	Campylobacter concisus 13826	E-value = 2.00E-54	Identity = 83.21%
	3	gi 154175138 ref YP_001408843.1	Campylobacter curvus 525.92	E-value = 1.00E-53	Identity = 83.94%
	4	gi 57506046 ref ZP_00371969.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-53	Identity = 83.21%
	5	gi 118474185 ref YP_891437.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-53	Identity = 83.94%
AB0289	1	gi 152990145 ref YP_001355867.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-16	Identity = 42.02%
	2	gi 57506045 ref ZP_00371968.1	Campylobacter upsaliensis RM3195	E-value = 8.00E-12	Identity = 38.26%
	3	gi 152993628 ref YP_001359349.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-11	Identity = 32.00%
	4	gi 118474642 ref YP_891438.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-10	Identity = 37.39%
	5	gi 154174767 ref YP_001408844.1	Campylobacter curvus 525.92	E-value = 6.00E-10	Identity = 34.78%
AB0290	1 <i>rpmF</i>	gi 78777967 ref YP_394282.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-09	Identity = 81.63%
	2	gi 152993627 ref YP_001359348.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-09	Identity = 77.55%
	3	gi 118474248 ref YP_891439.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-09	Identity = 81.25%
	4	gi 157164792 ref YP_001466311.1	Campylobacter concisus 13826	E-value = 1.00E-08	Identity = 79.17%
	5	gi 152990146 ref YP_001355868.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-08	Identity = 81.63%
AB0291	1 <i>plsX</i>	gi 157164231 ref YP_001466310.1	Campylobacter concisus 13826	E-value = 1.00E-113	Identity = 66.57%
	2	gi 152990147 ref YP_001355869.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-113	Identity = 63.44%
	3	gi 118474989 ref YP_891440.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-109	Identity = 61.89%
	4	gi 154175013 ref YP_001408845.1	Campylobacter curvus 525.92	E-value = 4.00E-107	Identity = 64.49%
	5	gi 154148731 ref YP_001407026.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-105	Identity = 58.61%
AB0292	1 <i>fabH</i>	gi 152993625 ref YP_001359346.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-125	Identity = 66.77%
	2	gi 78777965 ref YP_394280.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-122	Identity = 65.36%
	3	gi 152990148 ref YP_001355870.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-121	Identity = 64.63%
	4	gi 34558276 ref NP_908091.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-120	Identity = 61.47%
	5	gi 154173643 ref YP_001408846.1	Campylobacter curvus 525.92	E-value = 2.00E-109	Identity = 60.91%
AB0293	1	gi 152991213 ref YP_001356935.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-21	Identity = 39.16%
	2	gi 78776636 ref YP_392951.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-21	Identity = 39.87%
	3	gi 152991982 ref YP_001357703.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-20	Identity = 39.01%
	4	gi 57237982 ref YP_179231.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-20	Identity = 43.26%
	5	gi 34557424 ref NP_907239.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-20	Identity = 39.61%
AB0294	1	gi 34557720 ref NP_907535.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-95	Identity = 35.48%
	2	gi 154174332 ref YP_001408714.1	Campylobacter curvus 525.92	E-value = 3.00E-70	Identity = 29.17%
	3	gi 118474116 ref YP_891638.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-61	Identity = 27.64%
	4	gi 157164882 ref YP_001467249.1	Campylobacter concisus 13826	E-value = 3.00E-57	Identity = 26.95%
	5	gi 15791779 ref NP_281602.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-55	Identity = 26.97%
AB0295	1	gi 34557719 ref NP_907534.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-107	Identity = 34.89%
	2	gi 32266604 ref NP_860636.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-85	Identity = 30.83%
	3	gi 157414706 ref YP_001481962.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-59	Identity = 30.25%
	4	gi 153951747 ref YP_001398547.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 7.00E-58	Identity = 30.19%
	5	gi 15791778 ref NP_281601.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 8.00E-58	Identity = 30.32%
AB0296	1 <i>frdB</i>	gi 157164335 ref YP_001467268.1	Campylobacter concisus 13826	E-value = 2.00E-109	Identity = 74.68%
	2	gi 118474349 ref YP_891616.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-108	Identity = 73.42%
	3	gi 154175345 ref YP_001408712.1	Campylobacter curvus 525.92	E-value = 8.00E-108	Identity = 72.57%
	4	gi 57240866 ref ZP_00368814.1	Campylobacter lari RM2100	E-value = 2.00E-104	Identity = 71.73%
	5	gi 154148968 ref YP_001406422.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-103	Identity = 70.82%
AB0297	1 <i>frdA</i>	gi 118475601 ref YP_891617.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 76.93%

	2	gi 154174944 ref YP_001408711.1	Campylobacter curvus 525.92	E-value = 0	Identity = 77.54%
	3	gi 157165747 ref YP_001467269.1	Campylobacter concisus 13826	E-value = 0	Identity = 76.23%
	4	gi 34557227 ref NP_907042.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 74.89%
	5	gi 154148872 ref YP_001406421.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 73.14%
AB0298	1	frdC gi 153952486 ref YP_001398550.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 8.00E-77	Identity = 56.49%
	2	gi 15791775 ref NP_281598.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-77	Identity = 56.49%
	3	gi 90704622 emb CAF31348.1	Campylobacter jejuni	E-value = 2.00E-76	Identity = 56.11%
	4	gi 148926499 ref ZP_01810182.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 4.00E-76	Identity = 56.49%
	5	gi 57506240 ref ZP_00372158.1	Campylobacter upsaliensis RM3195	E-value = 5.00E-75	Identity = 55.34%
AB0299	1	nuoN gi 118746651 ref ZP_01594580.1	Geobacter lovleyi SZ	E-value = 1.00E-63	Identity = 38.13%
	2	gi 145617426 ref ZP_01773491.1	Geobacter bemidjensis Bem	E-value = 3.00E-61	Identity = 36.44%
	3	gi 39995460 ref NP_951411.1	Geobacter sulfurreducens PCA	E-value = 9.00E-61	Identity = 38.05%
	4	gi 148266241 ref YP_001232947.1	Geobacter uraniumreducens Rf4	E-value = 5.00E-60	Identity = 35.44%
	5	gi 91203934 emb CAJ71587.1	Candidatus Kuenenia stuttgartiensis	E-value = 2.00E-59	Identity = 37.30%
AB0300	1	nuoM gi 118474847 ref YP_891373.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-92	Identity = 42.33%
	2	gi 78224533 ref YP_386280.1	Geobacter metallireducens GS-15	E-value = 5.00E-88	Identity = 39.05%
	3	gi 148266242 ref YP_001232948.1	Geobacter uraniumreducens Rf4	E-value = 2.00E-87	Identity = 38.70%
	4	gi 118340557 gb ABK80607.1	uncultured Nitrospinaceae bacterium	E-value = 5.00E-87	Identity = 38.65%
	5	gi 110599304 ref ZP_01387544.1	Geobacter sp. FRC-32	E-value = 7.00E-85	Identity = 37.63%
AB0301	1	nuoL gi 149280559 ref ZP_01886675.1	Pedobacter sp. BAL39	E-value = 2.00E-127	Identity = 46.40%
	2	gi 118475000 ref YP_891372.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-123	Identity = 47.69%
	3	gi 91203930 emb CAJ71583.1	Candidatus Kuenenia stuttgartiensis	E-value = 6.00E-116	Identity = 42.48%
	4	gi 110637776 ref YP_677983.1	Cytophaga hutchinsonii ATCC 33406	E-value = 5.00E-113	Identity = 43.39%
	5	gi 24213586 ref NP_711067.1	Leptospira interrogans serovar Lai str. 56601	E-value = 2.00E-111	Identity = 41.16%
AB0302	1	nuoK gi 145225070 ref YP_001135748.1	Mycobacterium gilvum PYR-GCK	E-value = 7.00E-12	Identity = 41.94%
	2	gi 15612256 ref NP_223909.1	Helicobacter pylori J99	E-value = 2.00E-11	Identity = 41.84%
	3	gi 51892734 ref YP_075425.1	Symbiobacterium thermophilum IAM 14863	E-value = 3.00E-11	Identity = 41.67%
	4	gi 118045956 ref ZP_01514611.1	Chloroflexus aggregans DSM 9485	E-value = 4.00E-11	Identity = 41.84%
	5	gi 41409309 ref NP_962145.1	Mycobacterium avium subsp. paratuberculosis K-10	E-value = 4.00E-11	Identity = 43.18%
AB0303	1	nuoJ gi 118475160 ref YP_891370.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-18	Identity = 41.21%
	2	gi 146298997 ref YP_001193588.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-17	Identity = 40.72%
	3	gi 94985025 ref YP_604389.1	Deinococcus geothermalis DSM 11300	E-value = 4.00E-16	Identity = 38.41%
	4	gi 150026253 ref YP_001297079.1	Flavobacterium psychrophilum JIP02/86	E-value = 4.00E-16	Identity = 39.51%
	5	gi 110637778 ref YP_677985.1	Cytophaga hutchinsonii ATCC 33406	E-value = 2.00E-14	Identity = 36.14%
AB0304	1	nuoI gi 118475180 ref YP_891369.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-45	Identity = 59.87%
	2	gi 95928438 ref ZP_01311186.1	Desulfuromonas acetoxidans DSM 684	E-value = 5.00E-24	Identity = 46.62%
	3	gi 153891405 ref ZP_02012421.1	Opitutaceae bacterium TAV2	E-value = 9.00E-24	Identity = 41.25%
	4	gi 116329922 ref YP_799640.1	Leptospira borgpetersenii serovar Hardjo-bovis JB197	E-value = 1.00E-23	Identity = 39.38%
	5	gi 118746656 ref ZP_01594585.1	Geobacter lovleyi SZ	E-value = 2.00E-23	Identity = 47.06%
AB0305	1	nuoH gi 118475393 ref YP_891368.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-111	Identity = 52.35%
	2	gi 42525212 ref NP_970592.1	Bdellovibrio bacteriovorus HD100	E-value = 3.00E-60	Identity = 35.28%
	3	gi 118579074 ref YP_900324.1	Pelobacter propionicus DSM 2379	E-value = 5.00E-53	Identity = 36.47%
	4	gi 116619259 ref YP_821415.1	Solibacter usitatus Ellin6076	E-value = 2.00E-51	Identity = 35.55%
	5	gi 119714791 ref YP_921756.1	Nocardioides sp. JS614	E-value = 2.00E-49	Identity = 37.85%
AB0306	1	nuoG gi 118475236 ref YP_891367.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-93	Identity = 45.09%
	2	gi 42524472 ref NP_969852.1	Bdellovibrio bacteriovorus HD100	E-value = 1.00E-75	Identity = 36.63%
	3	gi 115378565 ref ZP_01465720.1	Stigmatella aurantiaca DW4/3-1	E-value = 3.00E-72	Identity = 33.55%
	4	gi 66219968 gb AAAY43001.1	Rhodothermus marinus	E-value = 8.00E-71	Identity = 33.99%
	5	gi 153891409 ref ZP_02012425.1	Opitutaceae bacterium TAV2	E-value = 1.00E-67	Identity = 34.23%

AB0307	1	<i>gltA</i>	gi 152993967 ref YP_001359688.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-165	Identity = 64.17%
	2		gi 78778294 ref YP_394609.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-152	Identity = 61.12%
	3		gi 157164090 ref YP_001467616.1	Campylobacter concisus 13826	E-value = 3.00E-148	Identity = 59.95%
	4		gi 154175359 ref YP_001408978.1	Campylobacter curvus 525.92	E-value = 8.00E-146	Identity = 58.82%
	5		gi 118475504 ref YP_891383.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-144	Identity = 58.25%
AB0308	1	<i>nuoF</i>	gi 118474520 ref YP_891366.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-116	Identity = 55.21%
	2		gi 42524473 ref NP_969853.1	Bdellovibrio bacteriovorus HD100	E-value = 1.00E-109	Identity = 47.33%
	3		gi 66219967 gb AA43000.1	Rhodothermus marinus	E-value = 2.00E-106	Identity = 46.44%
	4		gi 72163089 ref YP_290746.1	Thermobifida fusca YX	E-value = 5.00E-106	Identity = 45.99%
	5		gi 83814696 ref YP_444543.1	Salinibacter ruber DSM 13855	E-value = 8.00E-106	Identity = 46.17%
AB0309	1	<i>nuoE</i>	gi 42520577 ref NP_966492.1	Wolbachia endosymbiont of Drosophila melanogaster	E-value = 2.00E-36	Identity = 50.97%
	2		gi 58699915 ref ZP_00374508.1	Wolbachia endosymbiont of Drosophila ananassae	E-value = 3.00E-36	Identity = 50.97%
	3		gi 58584851 ref YP_198424.1	Wolbachia endosymbiont strain TRS of Brugia malayi	E-value = 6.00E-36	Identity = 50.00%
	4		gi 116329150 ref YP_798870.1	Leptospira borgpetersenii serovar Hardjo-ovis L550	E-value = 3.00E-35	Identity = 44.52%
	5		gi 24213591 ref NP_711072.1	Leptospira interrogans serovar Lai str. 56601	E-value = 6.00E-35	Identity = 44.59%
AB0310	1	<i>nuoCD</i>	gi 118474354 ref YP_891364.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-175	Identity = 54.98%
	2		gi 42524475 ref NP_969855.1	Bdellovibrio bacteriovorus HD100	E-value = 1.00E-149	Identity = 49.34%
	3		gi 108758426 ref YP_630946.1	Myxococcus xanthus DK 1622	E-value = 8.00E-111	Identity = 48.56%
	4		gi 115378554 ref ZP_01465709.1	Stigmatella aurantiaca DW4/3-1	E-value = 1.00E-110	Identity = 48.60%
	5		gi 15606519 ref NP_213899.1	Aquifex aeolicus VF5	E-value = 5.00E-100	Identity = 37.14%
AB0311	1	<i>nuoB</i>	gi 118474832 ref YP_891363.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-72	Identity = 71.60%
	2		gi 91203915 emb CAJ71568.1	Candidatus Kueneia stuttgartiensis	E-value = 8.00E-56	Identity = 61.94%
	3		gi 113939599 ref ZP_01425451.1	Herpetosiphon aurantiacus ATCC 23779	E-value = 2.00E-53	Identity = 60.26%
	4		gi 146299005 ref YP_001193596.1	Flavobacterium johnsoniae UW101	E-value = 3.00E-53	Identity = 56.10%
	5		gi 153891414 ref ZP_02012430.1	Opitutaceae bacterium TAV2	E-value = 3.00E-53	Identity = 62.16%
AB0312	1	<i>nuoA</i>	gi 118474143 ref YP_891362.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-19	Identity = 50.00%
	2		gi 146299006 ref YP_001193597.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-17	Identity = 47.27%
	3		gi 150026263 ref YP_001297089.1	Flavobacterium psychrophilum JIP02/86	E-value = 9.00E-17	Identity = 49.07%
	4		gi 149280570 ref ZP_01886686.1	Pedobacter sp. BAL39	E-value = 4.00E-16	Identity = 47.27%
	5		gi 110599316 ref ZP_01387556.1	Geobacter sp. FRC-32	E-value = 6.00E-15	Identity = 45.45%
AB0313	1		gi 15615875 ref NP_244179.1	Bacillus halodurans C-125	E-value = 8.00E-91	Identity = 42.97%
	2		gi 56964652 ref YP_176383.1	Bacillus clausii KSM-K16	E-value = 5.00E-84	Identity = 42.05%
	3		gi 29377360 ref NP_816514.1	Enterococcus faecalis V583	E-value = 9.00E-83	Identity = 40.62%
	4		gi 154494442 ref ZP_02033762.1	Parabacteroides merdae ATCC 43184	E-value = 2.00E-82	Identity = 40.87%
	5		gi 145622251 ref ZP_01778212.1	Petrotoga mobilis SJ95	E-value = 9.00E-82	Identity = 41.39%
AB0314	1		gi 152992345 ref YP_001358066.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 60.93%
	2		gi 78777062 ref YP_393377.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 60.33%
	3		gi 34557868 ref NP_907683.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 57.02%
	4		gi 152990593 ref YP_001356315.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 62.1%
	5		gi 154175363 ref YP_001408383.1	Campylobacter curvus 525.92	E-value = 0	Identity = 56.02%
AB0315	1		gi 117618621 ref YP_857867.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 8.00E-37	Identity = 54.84%
	2		gi 145297972 ref YP_001140813.1	Aeromonas salmonicida subsp. salmonicida A449	E-value = 4.00E-36	Identity = 54.19%
	3		gi 119945037 ref YP_942717.1	Psychromonas ingrahamii 37	E-value = 8.00E-34	Identity = 51.61%
	4		gi 90409110 ref ZP_01217232.1	Psychromonas sp. CNPT3	E-value = 2.00E-33	Identity = 51.61%
	5		gi 156973125 ref YP_001444032.1	Vibrio Harveyi ATCC BAA-1116	E-value = 1.00E-30	Identity = 48.05%
AB0316	1		gi 68248722 ref YP_247834.1	Haemophilus influenzae 86-028NP	E-value = 3.00E-58	Identity = 45.31%
	2		gi 148827252 ref YP_001292005.1	Haemophilus influenzae PittGG	E-value = 2.00E-57	Identity = 45.67%
	3		gi 145629003 ref ZP_01784802.1	Haemophilus influenzae 22.1-21	E-value = 3.00E-57	Identity = 45.67%
	4		gi 145631513 ref ZP_01787281.1	Haemophilus influenzae 22.4-21	E-value = 3.00E-57	Identity = 45.67%

	5	gi 42632166 ref ZP_00157704.1	Haemophilus influenzae R2866	E-value = 3.00E-57	Identity = 45.67%
AB0317	1	gi 152992018 ref YP_001357739.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-15	Identity = 40.95%
	2	gi 78777085 ref YP_393400.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-13	Identity = 36.79%
	3	gi 152990915 ref YP_001356637.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-10	Identity = 36.19%
AB0318	1	gi 32265649 ref NP_859681.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-42	Identity = 42.44%
	2	gi 118474364 ref YP_892308.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-41	Identity = 45.19%
	3	gi 157164936 ref YP_001467454.1	Campylobacter concisus 13826	E-value = 2.00E-40	Identity = 46.31%
	4	gi 34557201 ref NP_907016.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-39	Identity = 39.90%
	5	gi 119390595 pdb 2NRH A	Campylobacter jejuni	E-value = 5.00E-39	Identity = 44.93%
AB0319	1	<i>hisG</i> gi 34557202 ref NP_907017.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-67	Identity = 67.51%
	2	gi 152992020 ref YP_001357741.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-66	Identity = 65.33%
	3	gi 154174655 ref YP_001407781.1	Campylobacter curvus 525.92	E-value = 5.00E-64	Identity = 63.32%
	4	gi 118475111 ref YP_892309.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-64	Identity = 65.15%
	5	gi 152990913 ref YP_001356635.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-62	Identity = 63.86%
AB0320	1	gi 152990912 ref YP_001356634.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-35	Identity = 39.13%
	2	gi 152992021 ref YP_001357742.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-33	Identity = 36.96%
	3	gi 149194289 ref ZP_01871386.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-30	Identity = 39.57%
	4	gi 78777088 ref YP_393403.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-28	Identity = 35.09%
	5	gi 118474604 ref YP_891805.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-27	Identity = 36.36%
AB0321	1	gi 57505672 ref ZP_00371598.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-44	Identity = 28.80%
	2	gi 99080317 ref YP_612471.1	Silicibacter sp. TM1040	E-value = 3.00E-43	Identity = 27.29%
	3	gi 34558210 ref NP_908025.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-41	Identity = 26.54%
	4	gi 116250723 ref YP_766561.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 7.00E-41	Identity = 25.17%
	5	gi 154175470 ref YP_001408196.1	Campylobacter curvus 525.92	E-value = 2.00E-38	Identity = 27.53%
AB0322	1	gi 5714597 gb AAD47989.1	Pseudomonas sp. R9	E-value = 1.00E-31	Identity = 30.85%
	2	gi 146281368 ref YP_001171521.1	Pseudomonas stutzeri A1501	E-value = 6.00E-31	Identity = 26.62%
	3	gi 114881125 ref YP_758666.1	Pseudomonas aeruginosa	E-value = 1.00E-30	Identity = 30.74%
	4	gi 152112398 sp Q8XB94 YJIK_ECO57	Escherichia coli O157:H7	E-value = 3.00E-29	Identity = 35.22%
	5	gi 148550258 ref YP_001270360.1	Pseudomonas putida F1	E-value = 1.00E-28	Identity = 31.93%
AB0323	1	gi 78776881 ref YP_393196.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-53	Identity = 56.28%
	2	gi 152991549 ref YP_001357271.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-43	Identity = 46.52%
	3	gi 56478901 ref YP_160490.1	Azoarcus sp. EbN1	E-value = 9.00E-43	Identity = 46.00%
	4	gi 152993857 ref YP_001359578.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-42	Identity = 50.80%
	5	gi 30248823 ref NP_840893.1	Nitrosomonas europaea ATCC 19718	E-value = 2.00E-41	Identity = 44.51%
AB0324	1	<i>trpS</i> gi 157164791 ref YP_001466227.1	Campylobacter concisus 13826	E-value = 8.00E-112	Identity = 60.31%
	2	gi 118475659 ref YP_892487.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-111	Identity = 62.11%
	3	gi 57505890 ref ZP_00371815.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-111	Identity = 62.19%
	4	gi 57168527 ref ZP_00367660.1	Campylobacter coli RM2228	E-value = 6.00E-109	Identity = 60.94%
	5	gi 157414683 ref YP_001481939.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 8.00E-109	Identity = 61.88%
AB0325	1	gi 118729702 ref ZP_01578219.1	Delftia acidovorans SPH-1	E-value = 7.00E-161	Identity = 41.09%
	2	gi 91776737 ref YP_546493.1	Methylobacillus flagellatus KT	E-value = 5.00E-158	Identity = 43.42%
	3	gi 120612638 ref YP_972316.1	Acidovorax avenae subsp. citrulli AAC00-1	E-value = 1.00E-150	Identity = 42.99%
	4	gi 116694731 ref YP_728942.1	Ralstonia eutropha H16	E-value = 6.00E-149	Identity = 39.54%
	5	gi 83746751 ref ZP_00943799.1	Ralstonia solanacearum UW551	E-value = 6.00E-132	Identity = 40.40%
AB0326	1	gi 50121670 ref YP_050837.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 1.00E-111	Identity = 56.43%
	2	gi 28869771 ref NP_792390.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 3.00E-107	Identity = 53.81%
	3	gi 119858123 ref ZP_01639548.1	Pseudomonas putida W619	E-value = 4.00E-104	Identity = 52.59%
	4	gi 66045511 ref YP_235352.1	Pseudomonas syringae pv. syringae B728a	E-value = 4.00E-104	Identity = 53.33%
	5	gi 77459502 ref YP_349009.1	Pseudomonas fluorescens PFO-1	E-value = 1.00E-102	Identity = 52.80%

AB0328	1	gi 152994433 ref YP_001339268.1	Marinomonas sp. MWYL1	E-value = 4.00E-41	Identity = 31.32%
	2	gi 84994027 gb ABC68353.1	Pseudomonas putida	E-value = 8.00E-33	Identity = 29.55%
	3	gi 5070638 gb AAD39224.1 AF149851_5	Pseudomonas stutzeri KC	E-value = 1.00E-31	Identity = 26.67%
	4	gi 154494179 ref ZP_02033499.1	Parabacteroides merdae ATCC 43184	E-value = 1.00E-30	Identity = 25.68%
	5	gi 120609354 ref YP_969032.1	Acidovorax avenae subsp. citrulli AAC00-1	E-value = 2.00E-27	Identity = 26.63%
AB0329	1	gi 6959523 gb AAF33140.1 AF196567_16	Pseudomonas stutzeri	E-value = 6.00E-35	Identity = 26.36%
	2	gi 120609355 ref YP_969033.1	Acidovorax avenae subsp. citrulli AAC00-1	E-value = 1.00E-28	Identity = 25.53%
	3	gi 73669884 ref YP_305899.1	Methanosarcina barkeri str. Fusaro	E-value = 8.00E-28	Identity = 30.19%
	4	gi 152994432 ref YP_001339267.1	Marinomonas sp. MWYL1	E-value = 2.00E-27	Identity = 27.22%
	5	gi 50120479 ref YP_049646.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 5.00E-27	Identity = 25.00%
AB0330	1	gi 154173861 ref YP_001407330.1	Campylobacter curvus 525.92	E-value = 2.00E-05	Identity = 37.30%
	2	gi 149377009 ref ZP_01894760.1	Marinobacter algicola DG893	E-value = 9.00E-05	Identity = 39.71%
	3	gi 88859208 ref YP_340087.1	Pseudoalteromonas haloplanktis TAC125	E-value = 9.00E-05	Identity = 38.36%
AB0331	1	gi 34557929 ref NP_907744.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-143	Identity = 43.31%
	2	gi 6959518 gb AAF33135.1 AF196567_11	Pseudomonas stutzeri	E-value = 1.00E-112	Identity = 34.57%
	3	gi 28192385 gb AAL65282.1	Pseudomonas fluorescens	E-value = 1.00E-107	Identity = 33.33%
	4	gi 120609356 ref YP_969034.1	Acidovorax avenae subsp. citrulli AAC00-1	E-value = 5.00E-107	Identity = 32.60%
	5	gi 84994024 gb ABC68350.1	Pseudomonas putida	E-value = 3.00E-103	Identity = 31.42%
AB0332	1	gi 17230117 ref NP_486665.1	Nostoc sp. PCC 7120	E-value = 2.00E-23	Identity = 28.38%
	2	gi 34557928 ref NP_907743.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-23	Identity = 27.16%
	3	gi 16329200 ref NP_439928.1	Synechocystis sp. PCC 6803	E-value = 3.00E-21	Identity = 25.83%
	4	gi 119513795 ref ZP_01632771.1	Nodularia spumigena CCY9414	E-value = 2.00E-20	Identity = 27.09%
	5	gi 84994025 gb ABC68351.1	Pseudomonas putida	E-value = 9.00E-19	Identity = 25.78%
AB0333	1	gi 114776572 ref ZP_01451617.1	Mariprofundus ferrooxydans PV-1	E-value = 5.00E-42	Identity = 60.00%
	2	gi 88857738 ref ZP_01132381.1	Pseudoalteromonas tunicata D2	E-value = 1.00E-35	Identity = 56.42%
	3	gi 71282107 ref YP_269843.1	Colwellia psychrerythraea 34H	E-value = 2.00E-35	Identity = 50.84%
	4	gi 114772347 ref ZP_01449722.1	alpha proteobacterium HTCC2255	E-value = 1.00E-34	Identity = 51.81%
	5	gi 90022928 ref YP_528755.1	Saccharophagus degradans 2-40	E-value = 2.00E-34	Identity = 54.24%
AB0334	1	gi 34557631 ref NP_907446.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-101	Identity = 54.19%
	2	gi 70730623 ref YP_260364.1	Pseudomonas fluorescens Pf-5	E-value = 2.00E-69	Identity = 38.95%
	3	gi 86146498 ref ZP_01064821.1	Vibrio sp. MED222	E-value = 2.00E-68	Identity = 37.70%
	4	gi 104781204 ref YP_607702.1	Pseudomonas entomophila L48	E-value = 4.00E-64	Identity = 37.53%
	5	gi 70730865 ref YP_260606.1	Pseudomonas fluorescens Pf-5	E-value = 7.00E-62	Identity = 39.73%
AB0335	1	gi 34557630 ref NP_907445.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-74	Identity = 40.00%
	2	gi 83593671 ref YP_427423.1	Rhodospirillum rubrum ATCC 11170	E-value = 7.00E-57	Identity = 34.41%
	3	gi 69935950 ref ZP_00630837.1	Paracoccus denitrificans PD1222	E-value = 8.00E-46	Identity = 32.11%
	4	gi 50085819 ref YP_047329.1	Acinetobacter sp. ADP1	E-value = 3.00E-41	Identity = 31.88%
	5	gi 17231517 ref NP_488065.1	Nostoc sp. PCC 7120	E-value = 3.00E-41	Identity = 30.75%
AB0336	1	gi 34557629 ref NP_907444.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-179	Identity = 51.45%
	2	gi 117624159 ref YP_853072.1	Escherichia coli APEC O1	E-value = 6.00E-127	Identity = 39.11%
	3	gi 91211196 ref YP_541182.1	Escherichia coli UTI89	E-value = 1.00E-126	Identity = 39.11%
	4	gi 134048836 dbj BAF49458.1	Klebsiella pneumoniae	E-value = 1.00E-126	Identity = 39.11%
	5	gi 157145181 ref YP_001452500.1	Citrobacter koseri ATCC BAA-895	E-value = 2.00E-126	Identity = 39.29%
AB0337	1	gi 34557628 ref NP_907443.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-178	Identity = 56.73%
	2	gi 119385741 ref YP_916796.1	Paracoccus denitrificans PD1222	E-value = 7.00E-150	Identity = 46.64%
	3	gi 92110320 emb CAJ87588.1	Escherichia coli	E-value = 2.00E-140	Identity = 45.25%
	4	gi 83748862 ref ZP_00945874.1	Ralstonia solanacearum UW551	E-value = 3.00E-140	Identity = 48.74%
	5	gi 16122161 ref NP_405474.1	Yersinia pestis CO92	E-value = 3.00E-140	Identity = 45.25%
AB0338	1	gi 34557929 ref NP_907744.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-71	Identity = 29.04%

	2	gi 28192385 gb AAL65282.1	<i>Pseudomonas fluorescens</i>	E-value = 3.00E-67	Identity = 28.29%
	3	gi 17231518 ref NP_488066.1	<i>Nostoc</i> sp. PCC 7120	E-value = 2.00E-60	Identity = 29.03%
	4	gi 78356643 ref YP_388092.1	<i>Desulfovibrio desulfuricans</i> G20	E-value = 4.00E-60	Identity = 28.04%
	5	gi 75907894 ref YP_322190.1	<i>Anabaena variabilis</i> ATCC 29413	E-value = 8.00E-58	Identity = 28.59%
AB0339	1	gi 34557928 ref NP_907743.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 7.00E-31	Identity = 29.81%
	2	gi 118475050 ref YP_892365.1	<i>Campylobacter fetus</i> subsp. <i>fetus</i> 82-40	E-value = 1.00E-15	Identity = 28.57%
	3	gi 28211088 ref NP_782032.1	<i>Clostridium tetani</i> E88	E-value = 3.00E-15	Identity = 25.83%
	4	gi 116696381 ref YP_841957.1	<i>Ralstonia eutropha</i> H16	E-value = 2.00E-12	Identity = 26.22%
	5	gi 106894972 ref ZP_01362082.1	<i>Clostridium</i> sp. OhLAs	E-value = 2.00E-11	Identity = 29.39%
AB0340	1	gi 34557764 ref NP_907579.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 1.00E-91	Identity = 33.53%
	2	gi 95930822 ref ZP_01313554.1	<i>Desulfuromonas acetoxidans</i> DSM 684	E-value = 1.00E-75	Identity = 30.51%
	3	gi 121998685 ref YP_001003472.1	<i>Halorhodospira halophila</i> SL1	E-value = 4.00E-70	Identity = 29.86%
	4	gi 121997198 ref YP_001001985.1	<i>Halorhodospira halophila</i> SL1	E-value = 1.00E-68	Identity = 28.40%
	5	gi 121997196 ref YP_001001983.1	<i>Halorhodospira halophila</i> SL1	E-value = 2.00E-51	Identity = 26.18%
AB0341	1		<b>*** No matches found ***</b>		
AB0342	1	gi 118474270 ref YP_891230.1	<i>Campylobacter fetus</i> subsp. <i>fetus</i> 82-40	E-value = 8.00E-63	Identity = 47.27%
	2	gi 57238035 ref YP_179284.1	<i>Campylobacter jejuni</i> subsp. <i>jejuni</i> RM1221	E-value = 2.00E-62	Identity = 47.29%
	3	gi 148926168 ref ZP_01809853.1	<i>Campylobacter jejuni</i> subsp. <i>jejuni</i> CG8486	E-value = 2.00E-62	Identity = 47.29%
	4	gi 86152811 ref ZP_01071016.1	<i>Campylobacter jejuni</i> subsp. <i>jejuni</i> HB93-13	E-value = 2.00E-62	Identity = 47.65%
	5	gi 157415427 ref YP_001482683.1	<i>Campylobacter jejuni</i> subsp. <i>jejuni</i> 81116	E-value = 3.00E-62	Identity = 47.29%
AB0343	1	gi 152993537 ref YP_001359258.1	<i>Sulfurovum</i> sp. NBC37-1	E-value = 1.00E-146	Identity = 64.73%
	2	gi 34557266 ref NP_907081.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 3.00E-139	Identity = 60.51%
	3	gi 157165746 ref YP_001466225.1	<i>Campylobacter concisus</i> 13826	E-value = 1.00E-137	Identity = 59.66%
	4	gi 152991122 ref YP_001356844.1	<i>Nitratiruptor</i> sp. SB155-2	E-value = 3.00E-136	Identity = 62.80%
	5	gi 78777864 ref YP_394179.1	<i>Sulfuromonas denitrificans</i> ATCC 33889	E-value = 2.00E-134	Identity = 59.90%
AB0344	1	gi 152990931 ref YP_001356653.1	<i>Nitratiruptor</i> sp. SB155-2	E-value = 0	Identity = 40.36%
	2	gi 157164310 ref YP_001466554.1	<i>Campylobacter concisus</i> 13826	E-value = 0	Identity = 40.34%
	3	gi 118475397 ref YP_891606.1	<i>Campylobacter fetus</i> subsp. <i>fetus</i> 82-40	E-value = 0	Identity = 39.66%
	4	gi 154175361 ref YP_001408628.1	<i>Campylobacter curvus</i> 525.92	E-value = 0	Identity = 40.54%
	5	gi 154149248 ref YP_001406884.1	<i>Campylobacter hominis</i> ATCC BAA-381	E-value = 0	Identity = 39.41%
AB0345	1	gi 95930440 ref ZP_01313176.1	<i>Desulfuromonas acetoxidans</i> DSM 684	E-value = 3.00E-172	Identity = 58.00%
	2	gi 51244196 ref YP_064080.1	<i>Desulfotalea psychrophila</i> LSv54	E-value = 2.00E-164	Identity = 55.49%
	3	gi 34557357 ref NP_907172.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 2.00E-158	Identity = 56.57%
	4	gi 5748660 emb CAB53160.1	<i>Wolinella succinogenes</i>	E-value = 4.00E-158	Identity = 56.37%
	5	gi 13096571 pdb 1FS7 A	<i>Wolinella succinogenes</i>	E-value = 2.00E-152	Identity = 57.08%
AB0346	1	gi 17902506 emb CAD19316.1	<i>Sulfurospirillum deleyianum</i>	E-value = 1.00E-48	Identity = 56.00%
	2	gi 34557358 ref NP_907173.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 1.00E-47	Identity = 54.29%
	3	gi 51244195 ref YP_064079.1	<i>Desulfotalea psychrophila</i> LSv54	E-value = 1.00E-46	Identity = 54.02%
	4	gi 95930441 ref ZP_01313177.1	<i>Desulfuromonas acetoxidans</i> DSM 684	E-value = 3.00E-41	Identity = 47.70%
	5	gi 153889342 ref ZP_02010456.1	<i>Opiritaceae</i> bacterium TAV2	E-value = 2.00E-28	Identity = 41.88%
AB0347	1		<b>*** No matches found ***</b>		
AB0348	1	gi 34557884 ref NP_907699.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 5.00E-78	Identity = 34.98%
	2	gi 34557353 ref NP_907168.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 9.00E-76	Identity = 39.12%
	3	gi 85711301 ref ZP_01042360.1	<i>Idiomarina baltica</i> OS145	E-value = 3.00E-53	Identity = 33.26%
	4	gi 56460645 ref YP_155926.1	<i>Idiomarina loihiensis</i> L2TR	E-value = 7.00E-52	Identity = 31.93%
	5	gi 91203573 emb CAJ71226.1	<i>Candidatus Kueneia stuttgartiensis</i>	E-value = 1.00E-49	Identity = 29.96%
AB0349	1	gi 78777717 ref YP_394032.1	<i>Sulfuromonas denitrificans</i> ATCC 33889	E-value = 5.00E-43	Identity = 59.18%
	2	gi 152991541 ref YP_001357263.1	<i>Nitratiruptor</i> sp. SB155-2	E-value = 3.00E-42	Identity = 62.50%
	3	gi 149194251 ref ZP_01871348.1	<i>Caminibacter mediatlanticus</i> TB-2	E-value = 1.00E-26	Identity = 46.51%

AB0350	1	<i>napD</i>	gi 78777718 ref YP_394033.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-33	Identity = 60.47%
			gi 152991902 ref YP_001357623.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-21	Identity = 52.14%
			gi 152991542 ref YP_001357264.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-20	Identity = 50.44%
			gi 34557542 ref NP_907357.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-12	Identity = 42.98%
			gi 32265662 ref NP_859694.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-08	Identity = 35.71%
AB0351	1	<i>napL</i>	gi 78777716 ref YP_394031.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-59	Identity = 45.08%
			gi 152991901 ref YP_001357622.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-52	Identity = 38.72%
			gi 34557543 ref NP_907358.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-45	Identity = 32.66%
			gi 152992264 ref YP_001357985.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-42	Identity = 32.23%
			gi 152991543 ref YP_001357265.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-34	Identity = 27.71%
AB0352	1	<i>napF</i>	gi 78777715 ref YP_394030.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-39	Identity = 57.32%
			gi 152991544 ref YP_001357266.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-27	Identity = 45.51%
			gi 34557544 ref NP_907359.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-26	Identity = 42.68%
			gi 152991899 ref YP_001357620.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-24	Identity = 44.52%
			gi 118474508 ref YP_892315.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-03	Identity = 42.00%
AB0353	1	<i>napB</i>	gi 27529609 emb CAD55550.1	Wolinella succinogenes	E-value = 9.00E-32	Identity = 44.77%
			gi 152991545 ref YP_001357267.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-29	Identity = 37.32%
			gi 15792121 ref NP_281944.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-29	Identity = 39.55%
			gi 121613406 ref YP_001000472.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 5.00E-29	Identity = 39.55%
			gi 86150158 ref ZP_01068385.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 5.00E-29	Identity = 39.55%
AB0354	1	<i>napH</i>	gi 78777713 ref YP_394028.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-106	Identity = 66.92%
			gi 152991546 ref YP_001357268.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-97	Identity = 62.12%
			gi 152991897 ref YP_001357618.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-83	Identity = 55.43%
			gi 149194346 ref ZP_01871443.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-76	Identity = 55.64%
			gi 34557546 ref NP_907361.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-70	Identity = 52.85%
AB0355	1	<i>napG</i>	gi 78777712 ref YP_394027.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-101	Identity = 67.86%
			gi 152991547 ref YP_001357269.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-91	Identity = 62.55%
			gi 34557547 ref NP_907362.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-89	Identity = 60.31%
			gi 152991896 ref YP_001357617.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-86	Identity = 56.78%
			gi 154149165 ref YP_001407229.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-79	Identity = 56.57%
AB0356	1	<i>napA</i>	gi 78777711 ref YP_394026.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 79.06%
			gi 152991895 ref YP_001357616.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 78.16%
			gi 22651592 gb AAM21158.1	Sulfurospirillum barnesii	E-value = 0	Identity = 76.5%
			gi 34557548 ref NP_907363.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 71.75%
			gi 57240429 ref ZP_00368378.1	Campylobacter lari RM2100	E-value = 0	Identity = 69.98%
AB0357	1	<i>dctP</i>	gi 157163977 ref YP_001467737.1	Campylobacter concisus 13826	E-value = 5.00E-109	Identity = 66.25%
			gi 154173947 ref YP_001409177.1	Campylobacter curvus 525.92	E-value = 3.00E-105	Identity = 60.91%
			gi 34558158 ref NP_907973.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-102	Identity = 59.27%
			gi 149194847 ref ZP_01871941.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-91	Identity = 54.29%
			gi 32267367 ref NP_861399.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-90	Identity = 56.17%
AB0358	1	<i>dctQ</i>	gi 154175189 ref YP_001409178.1	Campylobacter curvus 525.92	E-value = 1.00E-40	Identity = 48.02%
			gi 34558159 ref NP_907974.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-39	Identity = 54.27%
			gi 157164535 ref YP_001467736.1	Campylobacter concisus 13826	E-value = 4.00E-35	Identity = 45.03%
			gi 32267368 ref NP_861400.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-26	Identity = 38.80%
			gi 149194848 ref ZP_01871942.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-19	Identity = 40.70%
AB0359	1	<i>dctM</i>	gi 34558160 ref NP_907975.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-135	Identity = 70.42%
			gi 4226003 emb CAA10758.1	Wolinella succinogenes	E-value = 6.00E-132	Identity = 70.22%
			gi 154174636 ref YP_001409179.1	Campylobacter curvus 525.92	E-value = 8.00E-128	Identity = 67.84%
			gi 157164109 ref YP_001467735.1	Campylobacter concisus 13826	E-value = 4.00E-125	Identity = 67.13%



	5	gi 149194849 ref ZP_01871943.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-114	Identity = 64.17%
AB0360	1		*** No matches found ***		
AB0361	1	gi 34557780 ref NP_907595.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-28	Identity = 36.41%
	2	gi 152993952 ref YP_001359673.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-28	Identity = 35.71%
	3	gi 118475245 ref YP_891579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-27	Identity = 34.10%
	4	gi 34558806 gb AAQ75151.1	Alvinella pompejana epibiont 6C6	E-value = 3.00E-26	Identity = 36.89%
	5	gi 152993408 ref YP_001359129.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-26	Identity = 33.48%
AB0362	1	menG gi 119475751 ref ZP_01616104.1	marine gamma proteobacterium HTCC2143	E-value = 1.00E-40	Identity = 51.28%
	2	gi 89094648 ref ZP_01167585.1	Oceanospirillum sp. MED92	E-value = 2.00E-39	Identity = 50.63%
	3	gi 152992677 ref YP_001358398.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-33	Identity = 46.79%
	4	gi 56477973 ref YP_159562.1	Azoarcus sp. EbN1	E-value = 3.00E-27	Identity = 39.75%
	5	gi 119897421 ref YP_932634.1	Azoarcus sp. BH72	E-value = 1.00E-26	Identity = 41.14%
AB0363	1	cysG gi 78778183 ref YP_394498.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-100	Identity = 71.49%
	2	gi 152991530 ref YP_001357252.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-96	Identity = 69.01%
	3	gi 152991888 ref YP_001357609.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-94	Identity = 69.83%
	4	gi 76667609 dbj BAE45634.1	Hydrogenobacter thermophilus	E-value = 2.00E-68	Identity = 54.04%
	5	gi 15605767 ref NP_213144.1	Aquifex aeolicus VF5	E-value = 7.00E-64	Identity = 51.46%
AB0364	1	gi 78777710 ref YP_394025.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-61	Identity = 47.59%
	2	gi 78777495 ref YP_393810.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-12	Identity = 28.84%
AB0365	1	gi 78777709 ref YP_394024.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-56	Identity = 60.93%
	2	gi 78777494 ref YP_393809.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-42	Identity = 47.93%
	3	gi 34557551 ref NP_907366.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-36	Identity = 42.45%
	4	gi 118474814 ref YP_891973.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-23	Identity = 34.60%
	5	gi 34557562 ref NP_907377.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-21	Identity = 33.50%
AB0366	1	gi 78778174 ref YP_394489.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-75	Identity = 46.23%
	2	gi 152991847 ref YP_001357568.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-57	Identity = 40.74%
	3	gi 15605768 ref NP_213145.1	Aquifex aeolicus VF5	E-value = 2.00E-20	Identity = 27.61%
	4	gi 52787131 ref YP_092960.1	Bacillus licheniformis ATCC 14580	E-value = 2.00E-15	Identity = 28.51%
	5	gi 52081744 ref YP_080535.1	Bacillus licheniformis ATCC 14580	E-value = 1.00E-14	Identity = 28.45%
AB0367	1	moaA gi 152991324 ref YP_001357046.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-123	Identity = 67.59%
	2	gi 152991807 ref YP_001357528.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-118	Identity = 62.69%
	3	gi 157163980 ref YP_001466045.1	Campylobacter concisus 13826	E-value = 1.00E-117	Identity = 64.09%
	4	gi 154174652 ref YP_001407497.1	Campylobacter curvus 525.92	E-value = 1.00E-117	Identity = 63.16%
	5	gi 78778109 ref YP_394424.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-115	Identity = 61.92%
AB0368	1	rpsO gi 152993457 ref YP_001359178.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-20	Identity = 65.91%
	2	gi 152990868 ref YP_001356590.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-20	Identity = 65.17%
	3	gi 157165733 ref YP_001467136.1	Campylobacter concisus 13826	E-value = 1.00E-19	Identity = 63.33%
	4	gi 154173820 ref YP_001408024.1	Campylobacter curvus 525.92	E-value = 1.00E-19	Identity = 65.56%
	5	gi 57240354 ref ZP_00368303.1	Campylobacter lari RM2100	E-value = 2.00E-19	Identity = 63.33%
AB0369	1	gi 152990870 ref YP_001356592.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-31	Identity = 48.85%
	2	gi 78776924 ref YP_393239.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-30	Identity = 51.15%
	3	gi 152993458 ref YP_001359179.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-30	Identity = 50.38%
	4	gi 157165239 ref YP_001467135.1	Campylobacter concisus 13826	E-value = 3.00E-27	Identity = 51.15%
	5	gi 15792214 ref NP_282037.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-27	Identity = 54.20%
AB0370	1	gi 34557436 ref NP_907251.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-77	Identity = 42.36%
	2	gi 118474400 ref YP_892255.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-76	Identity = 49.55%
	3	gi 108562830 ref YP_627146.1	Helicobacter pylori HPAG1	E-value = 7.00E-74	Identity = 44.09%
	4	gi 15611450 ref NP_223101.1	Helicobacter pylori J99	E-value = 3.00E-73	Identity = 43.80%
	5	gi 57242642 ref ZP_00370579.1	Campylobacter upsaliensis RM3195	E-value = 8.00E-73	Identity = 46.29%

AB0371	1	gi 152990554 ref YP_001356276.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-51	Identity = 66.20%
	2	gi 152993414 ref YP_001359135.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-50	Identity = 69.50%
	3	gi 78777342 ref YP_393657.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-46	Identity = 68.79%
	4	gi 150400634 ref YP_001324400.1	Methanococcus aeolicus Nankai-3	E-value = 3.00E-37	Identity = 59.71%
	5	gi 34556580 ref NP_906395.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-31	Identity = 49.31%
AB0372	1	gi 152990159 ref YP_001355881.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-78	Identity = 41.63%
	2	gi 34556741 ref NP_906556.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-74	Identity = 38.76%
	3	gi 154173704 ref YP_001408853.1	Campylobacter curvus 525.92	E-value = 6.00E-68	Identity = 40.55%
	4	gi 78776862 ref YP_393177.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-67	Identity = 40.48%
	5	gi 118474097 ref YP_891447.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-64	Identity = 40.69%
AB0373	1	gi 34556742 ref NP_906557.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-99	Identity = 84.55%
	2	gi 154173885 ref YP_001408852.1	Campylobacter curvus 525.92	E-value = 2.00E-98	Identity = 79.37%
	3	gi 157164291 ref YP_001466303.1	Campylobacter concisus 13826	E-value = 2.00E-97	Identity = 79.82%
	4	gi 118475303 ref YP_891446.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-97	Identity = 79.37%
	5	gi 154148743 ref YP_001406322.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-95	Identity = 80.72%
AB0374	1	ppiC gi 34557645 ref NP_907460.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-43	Identity = 41.70%
	2	gi 152990310 ref YP_001356032.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-39	Identity = 40.30%
	3	gi 154148224 ref YP_001407264.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-38	Identity = 40.66%
	4	gi 152993388 ref YP_001359109.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-37	Identity = 41.70%
	5	gi 118474611 ref YP_891704.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-36	Identity = 41.13%
AB0375	1	fa gi 78776709 ref YP_393024.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-150	Identity = 72.55%
	2	gi 118474472 ref YP_891705.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-148	Identity = 72.19%
	3	gi 117619723 ref YP_855324.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 5.00E-148	Identity = 70.82%
	4	gi 145300379 ref YP_001143220.1	Aeromonas salmonicida subsp. salmonicida A449	E-value = 3.00E-147	Identity = 70.54%
	5	gi 157165707 ref YP_001467104.1	Campylobacter concisus 13826	E-value = 1.00E-146	Identity = 71.35%
AB0376	1	ald gi 149371938 ref ZP_01891257.1	unidentified eubacterium SCB49	E-value = 0	Identity = 68.48%
	2	gi 68054027 ref ZP_00538192.1	Exiguobacterium sibiricum 255-15	E-value = 0	Identity = 67.59%
	3	gi 124009805 ref ZP_01694474.1	Microscilla marina ATCC 23134	E-value = 0	Identity = 67%
	4	gi 21229579 ref NP_635496.1	Xanthomonas campestris pv. campestris str. ATCC 33913	E-value = 0	Identity = 66.73%
	5	gi 86140526 ref ZP_01059085.1	Flavobacterium sp. MED217	E-value = 0	Identity = 66.47%
AB0377	1	gi 108758321 ref YP_633194.1	Myxococcus xanthus DK 1622	E-value = 8.00E-31	Identity = 51.26%
	2	gi 77166366 ref YP_344891.1	Nitrosococcus oceani ATCC 19707	E-value = 3.00E-30	Identity = 50.81%
	3	gi 114327687 ref YP_744844.1	Granulibacter thesedensis CGDNIH1	E-value = 1.00E-28	Identity = 45.04%
	4	gi 149371937 ref ZP_01891256.1	unidentified eubacterium SCB49	E-value = 7.00E-28	Identity = 44.88%
	5	gi 86140527 ref ZP_01059086.1	Flavobacterium sp. MED217	E-value = 5.00E-27	Identity = 46.55%
AB0378	1	exbD1 gi 77166132 ref YP_344657.1	Nitrosococcus oceani ATCC 19707	E-value = 5.00E-11	Identity = 34.92%
	2	gi 87308193 ref ZP_01090335.1	Blastopirellula marina DSM 3645	E-value = 4.00E-09	Identity = 34.59%
	3	gi 126463340 ref YP_001044454.1	Rhodobacter sphaeroides ATCC 17029	E-value = 1.00E-08	Identity = 32.20%
	4	gi 146279027 ref YP_001169186.1	Rhodobacter sphaeroides ATCC 17025	E-value = 2.00E-08	Identity = 32.20%
	5	gi 119478440 ref ZP_01618425.1	marine gamma proteobacterium HTCC2143	E-value = 5.00E-08	Identity = 31.50%
AB0379	1	exbB1 gi 153877900 ref ZP_02004410.1	Beggiatoa sp. PS	E-value = 6.00E-14	Identity = 32.64%
	2	gi 126667251 ref ZP_01738224.1	Marinobacter sp. ELB17	E-value = 9.00E-13	Identity = 31.05%
	3	gi 83645477 ref YP_433912.1	Hahella chejuensis KCTC 2396	E-value = 1.00E-11	Identity = 27.13%
	4	gi 150003064 ref YP_001297808.1	Bacteroides vulgatus ATCC 8482	E-value = 6.00E-11	Identity = 29.57%
	5	gi 77164132 ref YP_342657.1	Nitrosococcus oceani ATCC 19707	E-value = 2.00E-10	Identity = 30.83%
AB0380	1	gi 152993384 ref YP_001359105.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-77	Identity = 54.64%
	2	gi 149910540 ref ZP_01899179.1	Moritella sp. PE36	E-value = 2.00E-75	Identity = 46.23%
	3	gi 152990314 ref YP_001356036.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-71	Identity = 50.63%
	4	gi 127513075 ref YP_001094272.1	Shewanella loihica PV-4	E-value = 2.00E-69	Identity = 44.01%

	5	gi 153833374 ref ZP_01986041.1	Vibrio harveyi HY01	E-value = 7.00E-69	Identity = 44.85%
AB0381	1	gi 82523991 emb CAI78802.1	uncultured epsilon proteobacterium	E-value = 1.00E-40	Identity = 58.86%
	2	gi 154148531 ref YP_001405673.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-38	Identity = 59.09%
	3	gi 78776695 ref YP_393010.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-37	Identity = 60.13%
	4	gi 152990426 ref YP_001356148.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-36	Identity = 61.39%
	5	gi 154173675 ref YP_001407733.1	Campylobacter curvus 525.92	E-value = 4.00E-34	Identity = 56.13%
AB0382	1	gi 152990315 ref YP_001356037.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-176	Identity = 73.72%
	2	gi 152993383 ref YP_001359104.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-176	Identity = 72.90%
	3	gi 78776697 ref YP_393012.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-171	Identity = 71.16%
	4	gi 149193768 ref ZP_01870866.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-168	Identity = 70.63%
	5	gi 34557911 ref NP_907726.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-163	Identity = 67.29%
AB0383	1	gi 78777054 ref YP_393369.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-11	Identity = 46.24%
AB0384	1	gi 154148638 ref YP_001406457.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-75	Identity = 54.03%
	2	gi 57167586 ref ZP_00366726.1	Campylobacter coli RM2228	E-value = 9.00E-74	Identity = 57.61%
	3	gi 153951500 ref YP_001398431.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 4.00E-73	Identity = 54.70%
	4	gi 88596918 ref ZP_01100154.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 5.00E-73	Identity = 55.03%
	5	gi 15791902 ref NP_281725.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-73	Identity = 54.70%
AB0385	1	gi 34557906 ref NP_907721.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-108	Identity = 46.64%
	2	gi 152990769 ref YP_001356491.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-102	Identity = 45.09%
	3	gi 78777057 ref YP_393372.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-95	Identity = 45.09%
	4	gi 121612724 ref YP_001000242.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-94	Identity = 44.55%
	5	gi 15791903 ref NP_281726.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-94	Identity = 44.55%
AB0386	1	gi 152992232 ref YP_001357953.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 60.53%
	2	gi 154148423 ref YP_001406459.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 61.42%
	3	gi 154175003 ref YP_001408388.1	Campylobacter curvus 525.92	E-value = 0	Identity = 60.6%
	4	gi 57167588 ref ZP_00366728.1	Campylobacter coli RM2228	E-value = 0	Identity = 62.21%
	5	gi 157165397 ref YP_001466693.1	Campylobacter concisus 13826	E-value = 0	Identity = 60.42%
AB0387	1	gi 89094052 ref ZP_01166996.1	Oceanospirillum sp. MED92	E-value = 4.00E-63	Identity = 48.46%
	2	gi 152997779 ref YP_001342614.1	Marinomonas sp. MWYL1	E-value = 3.00E-60	Identity = 45.74%
	3	gi 109899638 ref YP_662893.1	Pseudoalteromonas atlantica T6c	E-value = 9.00E-60	Identity = 49.19%
	4	gi 95930648 ref ZP_01313382.1	Desulfuromonas acetoxidans DSM 684	E-value = 3.00E-59	Identity = 43.73%
	5	gi 90415525 ref ZP_01223459.1	marine gamma proteobacterium HTCC2207	E-value = 5.00E-59	Identity = 46.80%
AB0388	1	gi 152992555 ref YP_001358276.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-61	Identity = 38.01%
	2	gi 78776206 ref YP_392521.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-45	Identity = 37.58%
	3	gi 118602242 ref YP_903457.1	Candidatus Ruthia magnifica str. Cm (Calypotgena magnifica)	E-value = 2.00E-19	Identity = 28.75%
	4	gi 57237634 ref YP_178882.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-16	Identity = 31.56%
	5	gi 157415060 ref YP_001482316.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 6.00E-16	Identity = 31.56%
AB0389	1	gi 78778191 ref YP_394506.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-23	Identity = 49.65%
	2	gi 110601691 ref ZP_01389866.1	Geobacter sp. FRC-32	E-value = 7.00E-23	Identity = 52.85%
	3	gi 145620818 ref ZP_01776834.1	Geobacter bemidjensis Bem	E-value = 3.00E-21	Identity = 50.40%
	4	gi 78224117 ref YP_385864.1	Geobacter metallireducens GS-15	E-value = 7.00E-21	Identity = 48.03%
	5	gi 32265838 ref NP_859870.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-19	Identity = 43.45%
AB0390	1	gi 78778192 ref YP_394507.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-87	Identity = 35.97%
	2	gi 78224116 ref YP_385863.1	Geobacter metallireducens GS-15	E-value = 6.00E-86	Identity = 33.85%
	3	gi 145620817 ref ZP_01776833.1	Geobacter bemidjensis Bem	E-value = 2.00E-76	Identity = 35.67%
	4	gi 120556249 ref YP_960600.1	Marinobacter aquaeolei VT8	E-value = 2.00E-70	Identity = 31.50%
	5	gi 149375748 ref ZP_01893516.1	Marinobacter algicola DG893	E-value = 5.00E-70	Identity = 34.89%
AB0391	1	gi 78777774 ref YP_394089.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-81	Identity = 43.78%
	2	gi 154175027 ref YP_001408528.1	Campylobacter curvus 525.92	E-value = 4.00E-71	Identity = 39.41%

	3	gi 152991988 ref YP_001357709.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-70	Identity = 37.53%
	4	gi 34556534 ref NP_906349.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-70	Identity = 41.16%
	5	gi 118474873 ref YP_891901.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-67	Identity = 38.37%
AB0392	1	gi 34557614 ref NP_907429.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-20	Identity = 63.53%
	2	gi 153952484 ref YP_001397793.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 3.00E-20	Identity = 61.63%
	3	gi 157164205 ref YP_001467051.1	Campylobacter concisus 13826	E-value = 5.00E-20	Identity = 63.53%
	4	gi 118474680 ref YP_891902.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-20	Identity = 61.63%
	5	gi 15792419 ref NP_282242.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-20	Identity = 61.63%
AB0393	1	gi 152991208 ref YP_001356930.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-173	Identity = 64.30%
	2	gi 78777772 ref YP_394087.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-170	Identity = 64.48%
	3	gi 157164627 ref YP_001467050.1	Campylobacter concisus 13826	E-value = 3.00E-169	Identity = 62.99%
	4	gi 152991990 ref YP_001357711.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-168	Identity = 59.08%
	5	gi 118475690 ref YP_891903.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-167	Identity = 61.90%
AB0394	1	gi 57167975 ref ZP_00367114.1	Campylobacter coli RM2228	E-value = 3.00E-87	Identity = 54.49%
	2	gi 57237974 ref YP_179223.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-86	Identity = 54.49%
	3	gi 15792417 ref NP_282240.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-86	Identity = 54.18%
	4	gi 153951817 ref YP_001397795.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 6.00E-86	Identity = 53.87%
	5	gi 154174926 ref YP_001408525.1	Campylobacter curvus 525.92	E-value = 9.00E-86	Identity = 52.01%
AB0395	1		*** No matches found ***		
AB0396	1		*** No matches found ***		
AB0397	1	gi 15611819 ref NP_223470.1	Helicobacter pylori J99	E-value = 4.00E-33	Identity = 35.90%
	2	gi 15645435 ref NP_207609.1	Helicobacter pylori 26695	E-value = 5.00E-33	Identity = 35.90%
	3	gi 108563226 ref YP_627542.1	Helicobacter pylori HPAG1	E-value = 2.00E-32	Identity = 35.04%
	4	gi 109947291 ref YP_664519.1	Helicobacter acinonychis str. Sheeba	E-value = 4.00E-32	Identity = 34.62%
	5	gi 32266001 ref NP_860033.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-32	Identity = 38.79%
AB0398	1	gi 57168475 ref ZP_00367609.1	Campylobacter coli RM2228	E-value = 8.00E-69	Identity = 54.77%
	2	gi 153952523 ref YP_001398612.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-68	Identity = 55.19%
	3	gi 86151159 ref ZP_01069374.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-68	Identity = 55.19%
	4	gi 57505392 ref ZP_00371320.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-68	Identity = 54.77%
	5	gi 121612656 ref YP_001000047.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 3.00E-68	Identity = 54.77%
AB0399	1	gi 78777770 ref YP_394085.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-28	Identity = 65.77%
	2	gi 157164293 ref YP_001467048.1	Campylobacter concisus 13826	E-value = 1.00E-26	Identity = 69.37%
	3	gi 149194836 ref ZP_01871930.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-26	Identity = 63.64%
	4	gi 152991992 ref YP_001357713.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-25	Identity = 63.16%
	5	gi 154173752 ref YP_001408524.1	Campylobacter curvus 525.92	E-value = 4.00E-25	Identity = 65.77%
AB0400	1	gi 152993621 ref YP_001359342.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 67.68%
	2	gi 152991206 ref YP_001356928.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 66.87%
	3	gi 154174333 ref YP_001408523.1	Campylobacter curvus 525.92	E-value = 0	Identity = 63.29%
	4	gi 78777769 ref YP_394084.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 64.69%
	5	gi 34557610 ref NP_907425.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 63.3%
AB0401	1	gi 152991205 ref YP_001356927.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-23	Identity = 37.82%
	2	gi 34557609 ref NP_907424.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-22	Identity = 36.25%
	3	gi 57240454 ref ZP_00368403.1	Campylobacter lari RM2100	E-value = 2.00E-17	Identity = 32.94%
	4	gi 109946908 ref YP_664136.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-17	Identity = 34.44%
	5	gi 57167973 ref ZP_00367112.1	Campylobacter coli RM2228	E-value = 1.00E-16	Identity = 34.59%
AB0402	1	gi 149194840 ref ZP_01871934.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-80	Identity = 49.20%
	2	gi 78777766 ref YP_394081.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-80	Identity = 44.36%
	3	gi 152993619 ref YP_001359340.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-78	Identity = 44.50%
	4	gi 152991204 ref YP_001356926.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-70	Identity = 40.05%

	5	gi 154175231 ref YP_001408520.1	Campylobacter curvus 525.92	E-value = 7.00E-70	Identity = 40.67%
AB0403	1	gi 152992179 ref YP_001357900.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-153	Identity = 41.10%
	2	gi 118579744 ref YP_900994.1	Pelobacter propionicus DSM 2379	E-value = 7.00E-88	Identity = 30.15%
	3	gi 67939717 ref ZP_00532208.1	Chlorobium phaeobacteroides BS1	E-value = 3.00E-87	Identity = 31.27%
	4	gi 124522906 ref ZP_01697290.1	Bacillus coagulans 36D1	E-value = 9.00E-86	Identity = 31.26%
	5	gi 150004073 ref YP_001298817.1	Bacteroides vulgatus ATCC 8482	E-value = 4.00E-83	Identity = 29.82%
AB0404	1	gi 89092523 ref ZP_01165476.1	Oceanospirillum sp. MED92	E-value = 4.00E-164	Identity = 49.56%
	2	gi 114046627 ref YP_737177.1	Shewanella sp. MR-7	E-value = 1.00E-157	Identity = 47.06%
	3	gi 113969400 ref YP_733193.1	Shewanella sp. MR-4	E-value = 3.00E-157	Identity = 46.88%
	4	gi 117919509 ref YP_868701.1	Shewanella sp. ANA-3	E-value = 2.00E-156	Identity = 46.88%
	5	gi 87121771 ref ZP_01077658.1	Marinomonas sp. MED121	E-value = 3.00E-156	Identity = 47.62%
AB0405	1	gi 150425401 gb EDN17177.1	Vibrio cholerae AM-19226	E-value = 2.00E-60	Identity = 53.04%
	2	gi 116190895 ref ZP_01480630.1	Vibrio cholerae MO10	E-value = 4.00E-60	Identity = 52.61%
	3	gi 153212169 ref ZP_01947964.1	Vibrio cholerae 1587	E-value = 5.00E-60	Identity = 53.04%
	4	gi 15601750 ref NP_233381.1	Vibrio cholerae O1 biovar eltor str. N16961	E-value = 9.00E-60	Identity = 52.61%
	5	gi 116221832 ref ZP_01487234.1	Vibrio cholerae V51	E-value = 9.00E-60	Identity = 52.17%
AB0406	1		*** No matches found ***		
AB0407	1		*** No matches found ***		
AB0408	1	<i>mfd</i> gi 34557604 ref NP_907419.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 53.48%
	2	gi 152991203 ref YP_001356925.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 54.41%
	3	gi 118474341 ref YP_891912.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 52.26%
	4	gi 154175141 ref YP_001408519.1	Campylobacter curvus 525.92	E-value = 0	Identity = 50.91%
	5	gi 32265957 ref NP_859989.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 50.61%
AB0409	1	gi 152965280 ref YP_001361064.1	Kineococcus radiotolerans SRS30216	E-value = 2.00E-23	Identity = 32.35%
	2	gi 84622941 ref YP_450313.1	Xanthomonas oryzae pv. oryzae MAFF 311018	E-value = 4.00E-21	Identity = 32.54%
	3	gi 146300323 ref YP_001194914.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-20	Identity = 38.89%
	4	gi 21243666 ref NP_643248.1	Xanthomonas axonopodis pv. citri str. 306	E-value = 6.00E-20	Identity = 30.99%
	5	gi 78048639 ref YP_364814.1	Xanthomonas campestris pv. vesicatoria str. 85-10	E-value = 9.00E-20	Identity = 31.36%
AB0410	1	gi 91792122 ref YP_561773.1	Shewanella denitrificans OS217	E-value = 3.00E-34	Identity = 27.85%
	2	gi 127511624 ref YP_001092821.1	Shewanella loihica PV-4	E-value = 4.00E-34	Identity = 29.30%
	3	gi 118071530 ref ZP_01539725.1	Shewanella woodyi ATCC 51908	E-value = 1.00E-33	Identity = 29.77%
	4	gi 89072881 ref ZP_01159438.1	Photobacterium sp. SKA34	E-value = 4.00E-33	Identity = 31.89%
	5	gi 113969313 ref YP_733106.1	Shewanella sp. MR-4	E-value = 8.00E-33	Identity = 29.81%
AB0411	1		*** No matches found ***		
AB0412	1	<i>ompR</i> gi 157164458 ref YP_001466682.1	Campylobacter concisus 13826	E-value = 7.00E-60	Identity = 55.56%
	2	gi 118474546 ref YP_891938.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-59	Identity = 56.19%
	3	gi 57241251 ref ZP_00369198.1	Campylobacter lari RM2100	E-value = 2.00E-58	Identity = 55.31%
	4	gi 152991455 ref YP_001357177.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-58	Identity = 55.36%
	5	gi 154174385 ref YP_001408399.1	Campylobacter curvus 525.92	E-value = 6.00E-58	Identity = 55.31%
AB0413	1	gi 32267106 ref NP_861138.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-48	Identity = 33.01%
	2	gi 157163896 ref YP_001466683.1	Campylobacter concisus 13826	E-value = 2.00E-47	Identity = 34.87%
	3	gi 118474309 ref YP_891937.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-46	Identity = 35.52%
	4	gi 154174937 ref YP_001408398.1	Campylobacter curvus 525.92	E-value = 1.00E-45	Identity = 34.89%
	5	gi 34558118 ref NP_907933.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-42	Identity = 31.65%
AB0414	1	gi 78777930 ref YP_394245.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-83	Identity = 46.47%
	2	gi 149194213 ref ZP_01871311.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-79	Identity = 50.28%
	3	gi 152992422 ref YP_001358143.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-78	Identity = 46.59%
	4	gi 152990840 ref YP_001356562.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-73	Identity = 42.59%
	5	gi 34557444 ref NP_907259.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-71	Identity = 42.70%

AB0415	1	gi 78776484 ref YP_392799.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-80	Identity = 43.55%
	2	gi 32266390 ref NP_860422.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-49	Identity = 32.88%
	3	gi 108563004 ref YP_627320.1	Helicobacter pylori HPAG1	E-value = 1.00E-46	Identity = 32.35%
	4	gi 15645224 ref NP_207394.1	Helicobacter pylori 26695	E-value = 2.00E-46	Identity = 32.35%
	5	gi 1840146 gb AAB47275.1	Helicobacter pylori	E-value = 1.00E-45	Identity = 32.12%
AB0416	1	gi 78776483 ref YP_392798.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-24	Identity = 57.50%
	2	gi 111075014 gb ABH04866.1	Heliobacillus mobilis	E-value = 2.00E-13	Identity = 36.44%
	3	gi 7767177 pdb 1DZ3 A	Geobacillus stearothermophilus	E-value = 4.00E-11	Identity = 40.00%
	4	gi 6730308 pdb 1DC7 A	Salmonella typhimurium	E-value = 7.00E-11	Identity = 34.95%
	5	gi 95930680 ref ZP_01313414.1	Desulfuromonas acetoxidans DSM 684	E-value = 7.00E-11	Identity = 37.40%
AB0417	1		*** No matches found ***		
AB0418	1		*** No matches found ***		
AB0419	1	gi 152991201 ref YP_001356923.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-88	Identity = 57.68%
	2	gi 78777758 ref YP_394073.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-81	Identity = 53.90%
	3	gi 34557603 ref NP_907418.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-75	Identity = 50.98%
	4	gi 152993624 ref YP_001359345.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-73	Identity = 52.61%
	5	gi 149194440 ref ZP_01871537.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-64	Identity = 51.57%
AB0420	1	gi 152990347 ref YP_001356069.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-27	Identity = 36.23%
AB0421	1		*** No matches found ***		
AB0422	1	<i>ubiE</i> gi 152990174 ref YP_001355896.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-74	Identity = 55.32%
	2	gi 78776879 ref YP_393194.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-73	Identity = 58.97%
	3	gi 34557586 ref NP_907401.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-73	Identity = 58.30%
	4	gi 152993546 ref YP_001359267.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-72	Identity = 56.41%
	5	gi 57237375 ref YP_178388.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-68	Identity = 56.78%
AB0423	1	<i>xseA</i> gi 34556985 ref NP_906800.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-102	Identity = 53.57%
	2	gi 78776880 ref YP_393195.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-98	Identity = 47.52%
	3	gi 152990176 ref YP_001355898.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-97	Identity = 47.76%
	4	gi 32267231 ref NP_861263.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-95	Identity = 47.63%
	5	gi 149194320 ref ZP_01871417.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-90	Identity = 47.91%
AB0425	1	<i>cheW</i> gi 78222297 ref YP_384044.1	Geobacter metallireducens GS-15	E-value = 6.00E-23	Identity = 44.06%
	2	gi 145619181 ref ZP_01775233.1	Geobacter bemidjensis Bem	E-value = 2.00E-22	Identity = 43.36%
	3	gi 30249817 ref NP_841887.1	Nitrosomonas europaea ATCC 19718	E-value = 3.00E-22	Identity = 43.36%
	4	gi 118040205 ref ZP_01511601.1	Burkholderia phytofirmans PsJN	E-value = 9.00E-22	Identity = 38.71%
	5	gi 114331166 ref YP_747388.1	Nitrosomonas eutropha C91	E-value = 1.00E-21	Identity = 43.36%
AB0426	1	gi 46446767 ref YP_008132.1	Candidatus Protochlamydia amoebophila UWE25	E-value = 2.00E-54	Identity = 65.82%
	2	gi 78776704 ref YP_393019.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-49	Identity = 58.86%
	3	gi 71042629 pdb 2A2N A	Homo sapiens	E-value = 2.00E-45	Identity = 58.71%
	4	gi 32352196 dbj BAC78591.1	Oryza sativa (japonica cultivar-group)	E-value = 2.00E-45	Identity = 58.00%
	5	gi 115477779 ref NP_001062485.1	Oryza sativa (japonica cultivar-group)	E-value = 2.00E-45	Identity = 58.00%
AB0427	1	<i>panD</i> gi 152990004 ref YP_001355726.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-42	Identity = 76.07%
	2	gi 34557994 ref NP_907809.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-41	Identity = 70.25%
	3	gi 149195160 ref ZP_01872251.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-40	Identity = 72.58%
	4	gi 78776535 ref YP_392850.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-40	Identity = 71.90%
	5	gi 152993855 ref YP_001359576.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-37	Identity = 65.85%
AB0428	1	gi 12644595 sp O34247 Y1681_WOLSU	Wolinella succinogenes	E-value = 2.00E-17	Identity = 53.26%
	2	gi 34557993 ref NP_907808.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-17	Identity = 53.26%
	3	gi 152993854 ref YP_001359575.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-16	Identity = 54.81%
	4	gi 118474266 ref YP_891276.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-16	Identity = 48.08%
	5	gi 154175278 ref YP_001409123.1	Campylobacter curvus 525.92	E-value = 1.00E-15	Identity = 46.23%

AB0429	1	<i>ispA</i>	gij152990006 ref YP_001355728.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-89	Identity = 60.42%
			gij152991761 ref YP_001357482.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-87	Identity = 58.72%
			gij57168796 ref ZP_00367927.1	Campylobacter coli RM2228	E-value = 8.00E-82	Identity = 58.87%
			gij157415864 ref YP_001483120.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 5.00E-81	Identity = 58.91%
			gij86152300 ref ZP_01070511.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 7.00E-81	Identity = 59.27%
AB0430	1	<i>groES</i>	gij109948170 ref YP_665398.1	Helicobacter acinonychis str. Sheeba	E-value = 8.00E-20	Identity = 53.93%
			gij152993542 ref YP_001359263.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-20	Identity = 56.47%
			gij19338966 gb AAL86899.1 AF479029_1	Helicobacter pylori	E-value = 1.00E-19	Identity = 55.06%
			gij51035697 emb CAH17456.1	Helicobacter pylori	E-value = 2.00E-19	Identity = 52.81%
			gij51035687 emb CAH17451.1	Helicobacter pylori	E-value = 2.00E-19	Identity = 52.81%
AB0431	1	<i>groEL</i>	gij25452865 sp Q93GW2 CH60_WOLRE	Campylobacter rectus	E-value = 0	Identity = 77.94%
			gij118474493 ref YP_891876.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 77.84%
			gij157165097 ref YP_001466610.1	Campylobacter concisus 13826	E-value = 0	Identity = 77.9%
			gij154173786 ref YP_001408485.1	Campylobacter curvus 525.92	E-value = 0	Identity = 76.97%
			gij57240444 ref ZP_00368393.1	Campylobacter lari RM2100	E-value = 0	Identity = 77.82%
AB0432	1		gij78776517 ref YP_392832.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-53	Identity = 35.96%
			gij148266304 ref YP_001233010.1	Geobacter uraniumreducens Rf4	E-value = 3.00E-43	Identity = 28.70%
			gij39995560 ref NP_951511.1	Geobacter sulfurreducens PCA	E-value = 1.00E-42	Identity = 27.25%
			gij145621868 ref ZP_01777834.1	Petrotoga mobilis SJ95	E-value = 1.00E-42	Identity = 31.69%
			gij116749437 ref YP_846124.1	Syntrophobacter fumaroxidans MPOB	E-value = 1.00E-40	Identity = 26.16%
AB0433	1		gij78776518 ref YP_392833.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-62	Identity = 57.92%
			gij114778428 ref ZP_01453273.1	Mariprofundus ferrooxydans PV-1	E-value = 3.00E-59	Identity = 50.67%
			gij95928481 ref ZP_01311228.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-55	Identity = 49.78%
			gij149190294 ref ZP_01868568.1	Vibrio shilonii AK1	E-value = 5.00E-55	Identity = 53.13%
			gij77920671 ref YP_358486.1	Pelobacter carbinolicus DSM 2380	E-value = 9.00E-55	Identity = 47.75%
AB0434	1		gij24215865 ref NP_713346.1	Leptospira interrogans serovar Lai str. 56601	E-value = 1.00E-22	Identity = 31.23%
			gij157273426 gb ABV27325.1	Candidatus Chloracidobacterium thermophilum	E-value = 1.00E-17	Identity = 28.92%
			gij34535523 dbj BAC87349.1	Homo sapiens	E-value = 2.00E-17	Identity = 28.63%
			gij114585891 ref XP_001168299.1	Pan troglodytes	E-value = 2.00E-17	Identity = 28.63%
			gij109052687 ref XP_001098913.1	Macaca mulatta	E-value = 3.00E-17	Identity = 28.63%
AB0435	1		gij152992667 ref YP_001358388.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-19	Identity = 36.88%
			gij148547470 ref YP_001267572.1	Pseudomonas putida F1	E-value = 5.00E-13	Identity = 27.91%
			gij26990237 ref NP_745662.1	Pseudomonas putida KT2440	E-value = 7.00E-13	Identity = 27.91%
			gij119857144 ref ZP_01638574.1	Pseudomonas putida W619	E-value = 2.00E-10	Identity = 26.45%
			gij84317142 ref ZP_00965598.1	Pseudomonas aeruginosa C3719	E-value = 3.00E-10	Identity = 27.73%
AB0436	1		gij152992663 ref YP_001358384.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-26	Identity = 37.91%
AB0437	1		gij152992662 ref YP_001358383.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-28	Identity = 40.00%
AB0438	1		gij152992666 ref YP_001358387.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-108	Identity = 48.72%
AB0439	1		gij152992665 ref YP_001358386.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-48	Identity = 50.00%
			gij145622466 ref ZP_01778425.1	Petrotoga mobilis SJ95	E-value = 7.00E-44	Identity = 47.03%
			gij154684709 ref YP_001419870.1	Bacillus amyloliquefaciens FZB42	E-value = 1.00E-43	Identity = 50.75%
			gij152991413 ref YP_001357135.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-42	Identity = 43.98%
			gij153938448 ref YP_001389610.1	Clostridium botulinum F str. Langeland	E-value = 2.00E-41	Identity = 48.29%
AB0440	1		gij152992664 ref YP_001358385.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-83	Identity = 48.43%
			gij150401758 ref YP_001325524.1	Methanococcus aeolicus Nankai-3	E-value = 5.00E-13	Identity = 25.45%
AB0442	1		*** No matches found ***			
AB0443	1	<i>suhB</i>	gij149194588 ref ZP_01871684.1	Caminiabacter mediatlanticus TB-2	E-value = 2.00E-72	Identity = 56.69%
			gij152991453 ref YP_001357175.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-62	Identity = 49.02%
			gij120602452 ref YP_966852.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 5.00E-47	Identity = 37.70%

	4	gj 46580090 ref YP_010898.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 1.00E-46	Identity = 37.70%
	5	gj 85860102 ref YP_462304.1	Syntrophus aciditrophicus SB	E-value = 1.00E-45	Identity = 37.60%
AB0444	1	<i>glmS</i> gj 152990396 ref YP_001356118.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 67.88%
	2	gj 78777680 ref YP_393995.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 68.48%
	3	gj 152992132 ref YP_001357853.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 67.22%
	4	gj 154149127 ref YP_001406394.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 65.24%
	5	gj 157164153 ref YP_001466572.1	Campylobacter concisus 13826	E-value = 0	Identity = 64.74%
AB0445	1	<i>metK</i> gj 157165275 ref YP_001467053.1	Campylobacter concisus 13826	E-value = 5.00E-179	Identity = 78.84%
	2	gj 154175411 ref YP_001408530.1	Campylobacter curvus 525.92	E-value = 9.00E-177	Identity = 77.08%
	3	gj 78777673 ref YP_393988.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-176	Identity = 77.08%
	4	gj 118474936 ref YP_891896.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-175	Identity = 76.01%
	5	gj 57237978 ref YP_179227.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-173	Identity = 76.26%
AB0446	1	<i>accD</i> gj 152990942 ref YP_001356664.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-117	Identity = 74.09%
	2	gj 78777372 ref YP_393687.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-117	Identity = 72.30%
	3	gj 34556605 ref NP_906420.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-110	Identity = 71.05%
	4	gj 154174102 ref YP_001408791.1	Campylobacter curvus 525.92	E-value = 5.00E-108	Identity = 68.31%
	5	gj 57168702 ref ZP_00367834.1	Campylobacter coli RM2228	E-value = 8.00E-108	Identity = 67.62%
AB0447	1	<i>thiE</i> gj 78777371 ref YP_393686.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-39	Identity = 52.17%
	2	gj 149194760 ref ZP_01871855.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-32	Identity = 46.88%
	3	gj 152990941 ref YP_001356663.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-32	Identity = 41.94%
	4	gj 76260809 ref ZP_00768438.1	Chloroflexus aurantiacus J-10-fl	E-value = 2.00E-11	Identity = 32.37%
	5	gj 118728152 ref ZP_01576722.1	Clostridium cellulolyticum H10	E-value = 8.00E-11	Identity = 31.25%
AB0448	1	gj 157165650 ref YP_001466368.1	Campylobacter concisus 13826	E-value = 7.00E-36	Identity = 49.01%
	2	gj 154174606 ref YP_001408792.1	Campylobacter curvus 525.92	E-value = 8.00E-35	Identity = 49.67%
	3	gj 78777370 ref YP_393685.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-33	Identity = 50.00%
	4	gj 34556604 ref NP_906419.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-31	Identity = 50.00%
	5	gj 152992912 ref YP_001358633.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-31	Identity = 48.37%
AB0449	1	gj 152990939 ref YP_001356661.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-33	Identity = 29.25%
	2	gj 78777368 ref YP_393683.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-26	Identity = 26.79%
	3	gj 15791512 ref NP_281335.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-26	Identity = 29.55%
	4	gj 148926295 ref ZP_01809979.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 3.00E-26	Identity = 29.55%
	5	gj 86153822 ref ZP_01072025.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 4.00E-26	Identity = 29.55%
AB0450	1	gj 152990938 ref YP_001356660.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-116	Identity = 66.12%
	2	gj 78777367 ref YP_393682.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-114	Identity = 64.08%
	3	gj 152992909 ref YP_001358630.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-109	Identity = 60.97%
	4	gj 118475725 ref YP_891451.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-97	Identity = 56.21%
	5	gj 34556610 ref NP_906425.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-96	Identity = 57.10%
AB0451	1	<i>prmA</i> gj 78777868 ref YP_394183.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-66	Identity = 48.38%
	2	gj 152991152 ref YP_001356874.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-64	Identity = 47.14%
	3	gj 149194983 ref ZP_01872076.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-63	Identity = 52.92%
	4	gj 157164415 ref YP_001467284.1	Campylobacter concisus 13826	E-value = 6.00E-61	Identity = 46.21%
	5	gj 118474775 ref YP_892494.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-60	Identity = 46.35%
AB0452	1	<i>ftsH1</i> gj 34557037 ref NP_906852.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 68.78%
	2	gj 152991151 ref YP_001356873.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 66.11%
	3	gj 121612703 ref YP_001000794.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 0	Identity = 67.6%
	4	gj 57237998 ref YP_179247.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 0	Identity = 67.6%
	5	gj 86150719 ref ZP_01068935.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 0	Identity = 67.6%
AB0453	1	gj 85860311 ref YP_462513.1	Syntrophus aciditrophicus SB	E-value = 8.00E-40	Identity = 25.63%
AB0454	1	gj 118743495 ref ZP_01591498.1	Geobacter lovleyi SZ	E-value = 4.00E-15	Identity = 35.65%



	2	gi 118743931 ref ZP_01591930.1	Geobacter lovleyi SZ	E-value = 4.00E-15	Identity = 38.84%
	3	gi 78221998 ref YP_383745.1	Geobacter metallireducens GS-15	E-value = 2.00E-12	Identity = 35.59%
	4	gi 39997787 ref NP_953738.1	Geobacter sulfurreducens PCA	E-value = 6.00E-12	Identity = 33.93%
	5	gi 148252134 ref YP_001236719.1	Bradyrhizobium sp. BTAi1	E-value = 8.00E-12	Identity = 33.61%
AB0455	1	gi 144897852 emb CAM74716.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 1.00E-149	Identity = 35.35%
	2	gi 83311112 ref YP_421376.1	Magnetospirillum magneticum AMB-1	E-value = 1.00E-146	Identity = 35.27%
	3	gi 119900236 ref YP_935449.1	Azoarcus sp. BH72	E-value = 5.00E-138	Identity = 33.53%
	4	gi 71908921 ref YP_286508.1	Dechloromonas aromatica RCB	E-value = 1.00E-136	Identity = 34.13%
	5	gi 118581218 ref YP_902468.1	Pelobacter propionicus DSM 2379	E-value = 1.00E-114	Identity = 31.03%
AB0456	1	gi 152993536 ref YP_001359257.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 69.31%
	2	gi 152991149 ref YP_001356871.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 68.82%
	3	gi 34557040 ref NP_906855.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 66.21%
	4	gi 118474450 ref YP_892490.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 67.72%
	5	gi 154149292 ref YP_001406079.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 66.47%
AB0457	1	gi 152990985 ref YP_001356707.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-17	Identity = 43.40%
	2	gi 78776543 ref YP_392858.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-16	Identity = 40.38%
	3	gi 152993205 ref YP_001358926.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-16	Identity = 40.00%
	4	gi 67941706 ref ZP_00533752.1	Chlorobium phaeobacteroides BS1	E-value = 4.00E-14	Identity = 33.33%
	5	gi 88797576 ref ZP_01113165.1	Reinekea sp. MED297	E-value = 2.00E-13	Identity = 39.00%
AB0458	1	gi 152991495 ref YP_001357217.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-30	Identity = 47.10%
	2	gi 86142737 ref ZP_01061176.1	Flavobacterium sp. MED217	E-value = 2.00E-24	Identity = 42.76%
	3	gi 152992794 ref YP_001358515.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-23	Identity = 43.28%
	4	gi 152992506 ref YP_001358227.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-22	Identity = 36.51%
	5	gi 88804119 ref ZP_01119639.1	Robiginitalea biformata HTCC2501	E-value = 7.00E-22	Identity = 41.35%
AB0459	1	gi 78777643 ref YP_393958.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 51.12%
	2	gi 152990266 ref YP_001355988.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 50.71%
	3	gi 55819234 ref YP_142713.1	Acanthamoeba polyphaga mimivirus	E-value = 1.00E-113	Identity = 30.42%
	4	gi 33087146 gb AAP92777.1	Leptogorgia chilensis	E-value = 7.00E-69	Identity = 27.13%
	5	gi 3914061 sp O63852 MSHM_SARGL	Sarcophyton glaucum	E-value = 8.00E-69	Identity = 26.36%
AB0460	1	gi 34557635 ref NP_907450.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 48.21%
	2	gi 32265721 ref NP_859753.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 44.17%
	3	gi 152991871 ref YP_001357592.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 44.76%
	4	gi 3068786 gb AAC14433.1	Helicobacter pylori	E-value = 0	Identity = 43.47%
	5	gi 109947899 ref YP_665127.1	Helicobacter acinonychis str. Sheeba	E-value = 0	Identity = 43.09%
AB0461	1	gi 32265722 ref NP_859754.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-32	Identity = 38.18%
	2	gi 15611620 ref NP_223271.1	Helicobacter pylori J99	E-value = 7.00E-28	Identity = 37.14%
	3	gi 3068787 gb AAC14434.1	Helicobacter pylori	E-value = 9.00E-28	Identity = 37.14%
	4	gi 109947900 ref YP_665128.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-27	Identity = 35.71%
	5	gi 108563012 ref YP_627328.1	Helicobacter pylori HPAG1	E-value = 1.00E-27	Identity = 37.14%
AB0462	1	gi 34557633 ref NP_907448.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-31	Identity = 29.03%
	2	gi 3068785 gb AAC14432.1	Helicobacter pylori	E-value = 3.00E-25	Identity = 27.06%
	3	gi 15645230 ref NP_207400.1	Helicobacter pylori 26695	E-value = 8.00E-25	Identity = 28.13%
	4	gi 108563011 ref YP_627327.1	Helicobacter pylori HPAG1	E-value = 1.00E-24	Identity = 28.13%
	5	gi 15611619 ref NP_223270.1	Helicobacter pylori J99	E-value = 1.00E-24	Identity = 28.13%
AB0463	1	gi 34557295 ref NP_907110.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-27	Identity = 40.31%
AB0464	1	gi 54302981 ref YP_132974.1	Photobacterium profundum SS9	E-value = 7.00E-14	Identity = 27.57%
	2	gi 54303357 ref YP_133350.1	Photobacterium profundum SS9	E-value = 8.00E-14	Identity = 27.57%
	3	gi 126700147 ref YP_001089044.1	Clostridium difficile 630	E-value = 3.00E-13	Identity = 26.56%
	4	gi 145952974 ref ZP_01801982.1	Clostridium difficile QCD-32g58	E-value = 3.00E-12	Identity = 26.74%

	5	gi 56963185 ref YP_174916.1	Bacillus clausii KSM-K16	E-value = 3.00E-09	Identity = 25.27%
AB0465	1	gi 89093842 ref ZP_01166788.1	Oceanospirillum sp. MED92	E-value = 2.00E-107	Identity = 38.35%
	2	gi 89094966 ref ZP_01167896.1	Oceanospirillum sp. MED92	E-value = 4.00E-107	Identity = 41.02%
	3	gi 56476668 ref YP_158257.1	Azoarcus sp. EbN1	E-value = 4.00E-104	Identity = 37.82%
	4	gi 119897530 ref YP_932743.1	Azoarcus sp. BH72	E-value = 2.00E-101	Identity = 37.97%
	5	gi 104782044 ref YP_608542.1	Pseudomonas entomophila L48	E-value = 6.00E-101	Identity = 39.11%
AB0466	1	gi 89093841 ref ZP_01166787.1	Oceanospirillum sp. MED92	E-value = 4.00E-131	Identity = 45.69%
	2	gi 89094965 ref ZP_01167895.1	Oceanospirillum sp. MED92	E-value = 2.00E-130	Identity = 46.38%
	3	gi 16950513 dbj BAB72009.1	Pseudomonas putida	E-value = 2.00E-126	Identity = 45.26%
	4	gi 119855927 ref ZP_01637361.1	Pseudomonas putida W619	E-value = 3.00E-126	Identity = 45.26%
	5	gi 148547529 ref YP_001267631.1	Pseudomonas putida F1	E-value = 5.00E-126	Identity = 45.26%
AB0467	1	gi 119897532 ref YP_932745.1	Azoarcus sp. BH72	E-value = 1.00E-32	Identity = 66.35%
	2	gi 119855926 ref ZP_01637360.1	Pseudomonas putida W619	E-value = 7.00E-32	Identity = 63.81%
	3	gi 126355720 ref ZP_01712726.1	Pseudomonas putida GB-1	E-value = 1.00E-31	Identity = 63.81%
	4	gi 104782042 ref YP_608540.1	Pseudomonas entomophila L48	E-value = 2.00E-31	Identity = 62.86%
	5	gi 26990173 ref NP_745598.1	Pseudomonas putida KT2440	E-value = 4.00E-31	Identity = 62.86%
AB0468	1	gi 104782041 ref YP_608539.1	Pseudomonas entomophila L48	E-value = 2.00E-73	Identity = 37.43%
	2	gi 70731473 ref YP_261214.1	Pseudomonas fluorescens Pf-5	E-value = 2.00E-72	Identity = 39.07%
	3	gi 148547531 ref YP_001267633.1	Pseudomonas putida F1	E-value = 1.00E-71	Identity = 38.66%
	4	gi 126355719 ref ZP_01712725.1	Pseudomonas putida GB-1	E-value = 1.00E-71	Identity = 38.95%
	5	gi 26990172 ref NP_745597.1	Pseudomonas putida KT2440	E-value = 1.00E-71	Identity = 38.66%
AB0469	1	gi 89094962 ref ZP_01167892.1	Oceanospirillum sp. MED92	E-value = 3.00E-67	Identity = 28.34%
	2	gi 77459205 ref YP_348711.1	Pseudomonas fluorescens PFO-1	E-value = 6.00E-61	Identity = 26.62%
	3	gi 70731490 ref YP_261231.1	Pseudomonas fluorescens Pf-5	E-value = 4.00E-58	Identity = 26.11%
	4	gi 104781894 ref YP_608392.1	Pseudomonas entomophila L48	E-value = 2.00E-55	Identity = 27.48%
	5	gi 148547523 ref YP_001267625.1	Pseudomonas putida F1	E-value = 2.00E-53	Identity = 27.20%
AB0470	1	gi 89094961 ref ZP_01167891.1	Oceanospirillum sp. MED92	E-value = 7.00E-15	Identity = 29.19%
	2	gi 119855932 ref ZP_01637366.1	Pseudomonas putida W619	E-value = 1.00E-10	Identity = 26.00%
	3	gi 126355726 ref ZP_01712732.1	Pseudomonas putida GB-1	E-value = 5.00E-10	Identity = 25.38%
	4	gi 104781893 ref YP_608391.1	Pseudomonas entomophila L48	E-value = 3.00E-09	Identity = 25.12%
	5	gi 77459196 ref YP_348702.1	Pseudomonas fluorescens PFO-1	E-value = 3.00E-07	Identity = 25.81%
AB0471	1	gi 89094960 ref ZP_01167890.1	Oceanospirillum sp. MED92	E-value = 1.00E-52	Identity = 32.68%
	2	gi 119855931 ref ZP_01637365.1	Pseudomonas putida W619	E-value = 1.00E-51	Identity = 33.00%
	3	gi 77459204 ref YP_348710.1	Pseudomonas fluorescens PFO-1	E-value = 4.00E-47	Identity = 33.09%
	4	gi 148547525 ref YP_001267627.1	Pseudomonas putida F1	E-value = 1.00E-45	Identity = 33.25%
	5	gi 126355725 ref ZP_01712731.1	Pseudomonas putida GB-1	E-value = 1.00E-45	Identity = 33.25%
AB0472	1	gi 78777681 ref YP_393996.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-118	Identity = 38.35%
	2	gi 34556481 ref NP_906296.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-104	Identity = 35.77%
	3	gi 152990872 ref YP_001356594.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-100	Identity = 36.67%
	4	gi 83310566 ref YP_420830.1	Magnetospirillum magneticum AMB-1	E-value = 2.00E-95	Identity = 32.59%
	5	gi 144898358 emb CAM75222.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 6.00E-94	Identity = 31.68%
AB0473	1	hisA gi 152991153 ref YP_001356875.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-98	Identity = 77.45%
	2	gi 152993531 ref YP_001359252.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-97	Identity = 78.72%
	3	gi 78777870 ref YP_394185.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-89	Identity = 72.53%
	4	gi 34557034 ref NP_906849.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-80	Identity = 66.81%
	5	gi 154148634 ref YP_001406507.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-78	Identity = 67.09%
AB0474	1	gi 34556546 ref NP_906361.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-73	Identity = 48.23%
	2	gi 78778045 ref YP_394360.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-65	Identity = 46.45%
	3	gi 157273524 gb ABV27423.1	Candidatus Chloracidobacterium thermophilum	E-value = 1.00E-57	Identity = 39.67%

	4	gi 114563726 ref YP_751239.1	Shewanella frigidimarina NCIMB 400	E-value = 5.00E-57	Identity = 42.18%
	5	gi 78485127 ref YP_391052.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-56	Identity = 39.65%
AB0475	1	hisH1 gi 149194980 ref ZP_01872073.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-66	Identity = 63.68%
	2	gi 152991154 ref YP_001356876.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-66	Identity = 63.86%
	3	gi 78777871 ref YP_394186.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-66	Identity = 65.00%
	4	gi 34557033 ref NP_906848.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-65	Identity = 59.70%
	5	gi 152993530 ref YP_001359251.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-63	Identity = 61.08%
AB0476	1	ctsW gi 78777835 ref YP_394150.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-35	Identity = 43.68%
	2	gi 15792355 ref NP_282178.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-34	Identity = 44.50%
	3	gi 152990186 ref YP_001355908.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-34	Identity = 42.63%
	4	gi 57237915 ref YP_179163.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-34	Identity = 43.98%
	5	gi 154173802 ref YP_001408751.1	Campylobacter curvus 525.92	E-value = 3.00E-34	Identity = 44.44%
AB0477	1	gi 109898163 ref YP_661418.1	Pseudoalteromonas atlantica T6c	E-value = 1.00E-15	Identity = 40.63%
	2	gi 120599736 ref YP_964310.1	Shewanella sp. W3-18-1	E-value = 5.00E-15	Identity = 39.10%
	3	gi 145618719 ref ZP_01774776.1	Geobacter bemidjensis Bem	E-value = 8.00E-14	Identity = 41.88%
	4	gi 94502010 ref ZP_01308517.1	Oceanobacter sp. RED65	E-value = 1.00E-10	Identity = 35.61%
AB0479	1	lepA gi 152992639 ref YP_001358360.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 82.18%
	2	gi 152990185 ref YP_001355907.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 76.43%
	3	gi 154173908 ref YP_001408755.1	Campylobacter curvus 525.92	E-value = 0	Identity = 75.08%
	4	gi 157164531 ref YP_001466501.1	Campylobacter concisus 13826	E-value = 0	Identity = 74.75%
	5	gi 34557971 ref NP_907786.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 74.07%
AB0480	1	gi 15896889 ref NP_350238.1	Clostridium acetobutylicum ATCC 824	E-value = 2.00E-21	Identity = 68.18%
	2	gi 153953431 ref YP_001394196.1	Clostridium kluyveri DSM 555	E-value = 3.00E-21	Identity = 65.91%
	3	gi 148379283 ref YP_001253824.1	Clostridium botulinum A str. ATCC 3502	E-value = 2.00E-20	Identity = 64.77%
	4	gi 150019612 ref YP_001311866.1	Clostridium beijerinckii NCIMB 8052	E-value = 2.00E-19	Identity = 61.36%
	5	gi 110799183 ref YP_694658.1	Clostridium perfringens ATCC 13124	E-value = 2.00E-16	Identity = 61.80%
AB0481	1	gi 154496596 ref ZP_02035292.1	Bacteroides capillosus ATCC 29799	E-value = 0	Identity = 54.99%
	2	gi 156868268 gb EDO61640.1	Clostridium leptum DSM 753	E-value = 0	Identity = 54.79%
	3	gi 42525527 ref NP_970625.1	Treponema denticola ATCC 35405	E-value = 0	Identity = 52.53%
	4	gi 29374937 ref NP_814090.1	Enterococcus faecalis V583	E-value = 0	Identity = 52.37%
	5	gi 118444416 ref YP_878393.1	Clostridium novyi NT	E-value = 0	Identity = 53.7%
AB0483	1	cadF gi 118474477 ref YP_891591.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-61	Identity = 41.86%
	2	gi 154147928 ref YP_001407122.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-58	Identity = 40.41%
	3	gi 154174678 ref YP_001407584.1	Campylobacter curvus 525.92	E-value = 8.00E-57	Identity = 40.29%
	4	gi 157164740 ref YP_001466195.1	Campylobacter concisus 13826	E-value = 2.00E-54	Identity = 41.64%
	5	gi 34556650 ref NP_906465.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-54	Identity = 40.52%
AB0484	1	prsA gi 152992638 ref YP_001358359.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-129	Identity = 74.03%
	2	gi 34557951 ref NP_907766.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-126	Identity = 72.40%
	3	gi 57242096 ref ZP_00370036.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-122	Identity = 71.43%
	4	gi 118474648 ref YP_892608.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-121	Identity = 68.93%
	5	gi 157164147 ref YP_001467207.1	Campylobacter concisus 13826	E-value = 4.00E-121	Identity = 69.26%
AB0485	1	gi 34557902 ref NP_907717.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-51	Identity = 37.14%
	2	gi 94271809 ref ZP_01292017.1	delta proteobacterium MLMS-1	E-value = 5.00E-38	Identity = 32.37%
	3	gi 94264011 ref ZP_01287812.1	delta proteobacterium MLMS-1	E-value = 1.00E-37	Identity = 32.11%
AB0486	1	trmU1 gi 78776909 ref YP_393224.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-101	Identity = 54.57%
	2	gi 152992636 ref YP_001358357.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-99	Identity = 51.32%
	3	gi 121613044 ref YP_999778.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 7.00E-99	Identity = 55.16%
	4	gi 153951834 ref YP_001397317.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-98	Identity = 54.87%
	5	gi 157414371 ref YP_001481627.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 2.00E-98	Identity = 55.16%

AB0487	1	<i>trmU2</i>	gi 124895824 gb EAY69704.1	Burkholderia dolosa AUO158	E-value = 1.00E-106	Identity = 53.19%
	2		gi 115350645 ref YP_772484.1	Burkholderia cepacia AMMD	E-value = 5.00E-106	Identity = 53.19%
	3		gi 84360823 ref ZP_00985512.1	Burkholderia dolosa AUO158	E-value = 2.00E-105	Identity = 53.35%
	4		gi 76810425 ref YP_334767.1	Burkholderia pseudomallei 1710b	E-value = 7.00E-105	Identity = 52.76%
	5		gi 99912870 ref ZP_01319568.1	Burkholderia pseudomallei 1655	E-value = 2.00E-104	Identity = 52.49%
AB0488	1	<i>folk</i>	gi 152992633 ref YP_001358354.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-36	Identity = 46.84%
	2		gi 152990181 ref YP_001355903.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-34	Identity = 46.20%
	3		gi 78776887 ref YP_393202.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-32	Identity = 50.31%
	4		gi 154174244 ref YP_001408774.1	Campylobacter curvus 525.92	E-value = 1.00E-28	Identity = 44.37%
	5		gi 154148891 ref YP_001406763.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-28	Identity = 44.52%
AB0489	1	<i>pepQ</i>	gi 152992632 ref YP_001358353.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-99	Identity = 54.28%
	2		gi 152990180 ref YP_001355902.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-94	Identity = 53.24%
	3		gi 34557960 ref NP_907775.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-92	Identity = 48.39%
	4		gi 32266443 ref NP_860475.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-92	Identity = 54.12%
	5		gi 157164005 ref YP_001467218.1	Campylobacter concisus 13826	E-value = 1.00E-90	Identity = 53.08%
AB0490	1	<i>aroQ</i>	gi 34557961 ref NP_907776.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-53	Identity = 68.92%
	2		gi 57241948 ref ZP_00369888.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-50	Identity = 68.49%
	3		gi 148926872 ref ZP_01810550.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-50	Identity = 62.67%
	4		gi 57168748 ref ZP_00367879.1	Campylobacter coli RM2228	E-value = 5.00E-50	Identity = 64.38%
	5		gi 57240763 ref ZP_00368711.1	Campylobacter lari RM2100	E-value = 1.00E-49	Identity = 65.96%
AB0491	1		gi 152990178 ref YP_001355900.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-90	Identity = 46.65%
	2		gi 149194325 ref ZP_01871422.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-83	Identity = 42.54%
	3		gi 78776885 ref YP_393200.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-82	Identity = 41.32%
	4		gi 152992630 ref YP_001358351.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-81	Identity = 38.73%
	5		gi 154174508 ref YP_001408778.1	Campylobacter curvus 525.92	E-value = 2.00E-80	Identity = 40.29%
AB0492	1	<i>pspA</i>	gi 78776884 ref YP_393199.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-76	Identity = 51.92%
	2		gi 152992629 ref YP_001358350.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-72	Identity = 56.97%
	3		gi 152990177 ref YP_001355899.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-72	Identity = 52.58%
	4		gi 154148512 ref YP_001406767.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-67	Identity = 46.37%
	5		gi 86151511 ref ZP_01069726.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-65	Identity = 47.55%
AB0493	1			<b>*** No matches found ***</b>		
AB0494	1	<i>ackA1</i>	gi 154498124 ref ZP_02036502.1	Bacteroides capillosus ATCC 29799	E-value = 1.00E-116	Identity = 52.01%
	2		gi 19704506 ref NP_604068.1	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	E-value = 6.00E-115	Identity = 52.02%
	3		gi 148323175 gb EDK88425.1	Fusobacterium nucleatum subsp. polymorphum ATCC 10953	E-value = 9.00E-115	Identity = 51.77%
	4		gi 156865731 gb EDO59162.1	Clostridium sp. L2-50	E-value = 3.00E-114	Identity = 51.39%
	5		gi 34762396 ref ZP_00143397.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 8.00E-114	Identity = 50.76%
AB0495	1	<i>pta</i>	gi 19704507 ref NP_604069.1	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	E-value = 1.00E-100	Identity = 57.75%
	2		gi 148323174 gb EDK88424.1	Fusobacterium nucleatum subsp. polymorphum ATCC 10953	E-value = 2.00E-99	Identity = 56.53%
	3		gi 34762395 ref ZP_00143396.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 9.00E-99	Identity = 55.93%
	4		gi 89211635 ref ZP_01189989.1	Halothermothrix orenii H 168	E-value = 2.00E-93	Identity = 55.02%
	5		gi 78044760 ref YP_360288.1	Carboxydotherrnus hydrogenoformans Z-2901	E-value = 5.00E-93	Identity = 53.80%
AB0496	1	<i>ackA2</i>	gi 19704506 ref NP_604068.1	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	E-value = 9.00E-124	Identity = 57.29%
	2		gi 148323175 gb EDK88425.1	Fusobacterium nucleatum subsp. polymorphum ATCC 10953	E-value = 1.00E-123	Identity = 57.04%
	3		gi 42526445 ref NP_971543.1	Treponema denticola ATCC 35405	E-value = 2.00E-122	Identity = 54.52%
	4		gi 34762396 ref ZP_00143397.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 5.00E-122	Identity = 56.53%
	5		gi 78042887 ref YP_360287.1	Carboxydotherrnus hydrogenoformans Z-2901	E-value = 8.00E-118	Identity = 54.91%
AB0497	1		gi 91977554 ref YP_570213.1	Rhodospseudomonas palustris BisB5	E-value = 3.00E-94	Identity = 56.17%
	2		gi 15888334 ref NP_354015.1	Agrobacterium tumefaciens str. C58	E-value = 8.00E-94	Identity = 58.55%
	3		gi 153010261 ref YP_001371475.1	Ochrobactrum anthropi ATCC 49188	E-value = 2.00E-93	Identity = 54.40%

	4	gi 119877696 ref ZP_01644684.1	Stenotrophomonas maltophilia R551-3	E-value = 3.00E-92	Identity = 55.45%
	5	gi 21492770 ref NP_659845.1	Rhizobium etli CFN 42	E-value = 1.00E-90	Identity = 54.37%
AB0498	1	ackA3 gi 42526445 ref NP_971543.1	Treponema denticola ATCC 35405	E-value = 4.00E-124	Identity = 54.50%
	2	gi 19704506 ref NP_604068.1	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	E-value = 4.00E-123	Identity = 54.52%
	3	gi 34762396 ref ZP_00143397.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 4.00E-123	Identity = 55.03%
	4	gi 148323175 gb EDK88425.1	Fusobacterium nucleatum subsp. polymorphum ATCC 10953	E-value = 6.00E-123	Identity = 54.02%
	5	gi 146297045 ref YP_001180816.1	Caldicellulosiruptor saccharolyticus DSM 8903	E-value = 5.00E-122	Identity = 55.28%
AB0499	1	dnaQ1 gi 152992740 ref YP_001358461.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-56	Identity = 55.50%
	2	gi 34557013 ref NP_906828.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-53	Identity = 51.52%
	3	gi 78485464 ref YP_391389.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-50	Identity = 49.75%
	4	gi 78777649 ref YP_393964.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-50	Identity = 54.36%
	5	gi 27379228 ref NP_770757.1	Bradyrhizobium japonicum USDA 110	E-value = 6.00E-47	Identity = 43.78%
AB0500	1	gi 34557014 ref NP_906829.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-124	Identity = 40.39%
	2	gi 78777650 ref YP_393965.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-113	Identity = 40.72%
	3	gi 27379227 ref NP_770756.1	Bradyrhizobium japonicum USDA 110	E-value = 1.00E-108	Identity = 33.77%
	4	gi 152992739 ref YP_001358460.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-107	Identity = 36.33%
	5	gi 83591973 ref YP_425725.1	Rhodospirillum rubrum ATCC 11170	E-value = 2.00E-103	Identity = 32.45%
AB0501	1	gi 152990273 ref YP_001355995.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-180	Identity = 65.23%
	2	gi 152992738 ref YP_001358459.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-179	Identity = 67.50%
	3	gi 34557015 ref NP_906830.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-177	Identity = 65.12%
	4	gi 148549182 ref YP_001269284.1	Pseudomonas putida F1	E-value = 5.00E-175	Identity = 64.72%
	5	gi 26988474 ref NP_743899.1	Pseudomonas putida KT2440	E-value = 5.00E-175	Identity = 63.80%
AB0502	1	gi 118053915 ref ZP_01522457.1	Comamonas testosteroni KF-1	E-value = 2.00E-20	Identity = 50.50%
	2	gi 94314701 ref YP_587910.1	Ralstonia metallidurans CH34	E-value = 6.00E-20	Identity = 45.00%
	3	gi 145588721 ref YP_001155318.1	Polynucleobacter sp. QLW-P1DMWA-1	E-value = 8.00E-20	Identity = 49.49%
	4	gi 89902541 ref YP_525012.1	Rhodoferax ferrireducens T118	E-value = 1.00E-19	Identity = 48.98%
	5	gi 119897268 ref YP_932481.1	Azoarcus sp. BH72	E-value = 4.00E-19	Identity = 47.47%
AB0504	1	gi 152992738 ref YP_001358459.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-172	Identity = 65.22%
	2	gi 157148011 ref YP_001455330.1	Citrobacter koseri ATCC BAA-895	E-value = 3.00E-170	Identity = 63.65%
	3	gi 15598430 ref NP_251924.1	Pseudomonas aeruginosa PAO1	E-value = 7.00E-170	Identity = 64.64%
	4	gi 67155148 ref ZP_00416776.1	Azotobacter vinelandii AvOP	E-value = 2.00E-169	Identity = 66.79%
	5	gi 152990273 ref YP_001355995.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-169	Identity = 64.47%
AB0505	1	gi 78777652 ref YP_393967.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-20	Identity = 48.54%
	2	gi 34557016 ref NP_906831.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-17	Identity = 46.53%
	3	gi 153870669 ref ZP_02000019.1	Beggiatoa sp. PS	E-value = 1.00E-16	Identity = 53.92%
	4	gi 69933594 ref ZP_00628796.1	Paracoccus denitrificans PD1222	E-value = 2.00E-16	Identity = 44.44%
	5	gi 145588721 ref YP_001155318.1	Polynucleobacter sp. QLW-P1DMWA-1	E-value = 6.00E-16	Identity = 46.46%
AB0506	1	dnaQ2 gi 78777649 ref YP_393964.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-54	Identity = 56.57%
	2	gi 145588723 ref YP_001155320.1	Polynucleobacter sp. QLW-P1DMWA-1	E-value = 2.00E-51	Identity = 47.76%
	3	gi 152992740 ref YP_001358461.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-51	Identity = 52.26%
	4	gi 152990271 ref YP_001355993.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-50	Identity = 54.55%
	5	gi 78485464 ref YP_391389.1	Thiomicrospira crunogena XCL-2	E-value = 2.00E-49	Identity = 48.02%
AB0507	1	gi 78777650 ref YP_393965.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-126	Identity = 42.36%
	2	gi 152992739 ref YP_001358460.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-112	Identity = 37.42%
	3	gi 152990272 ref YP_001355994.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-107	Identity = 37.48%
	4	gi 34557014 ref NP_906829.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-107	Identity = 36.65%
	5	gi 89094458 ref ZP_01167398.1	Oceanospirillum sp. MED92	E-value = 5.00E-104	Identity = 35.26%
AB0508	1	gi 54310464 ref YP_131484.1	Photobacterium profundum SS9	E-value = 4.00E-130	Identity = 43.99%
	2	gi 119477496 ref ZP_01617687.1	marine gamma proteobacterium HTCC2143	E-value = 7.00E-130	Identity = 41.17%

	3	gi 90413369 ref ZP_01221362.1	Photobacterium profundum 3TCK	E-value = 2.00E-129	Identity = 43.47%
	4	gi 21674620 ref NP_662685.1	Chlorobium tepidum TLS	E-value = 5.00E-129	Identity = 43.41%
	5	gi 117924349 ref YP_864966.1	Magnetococcus sp. MC-1	E-value = 3.00E-128	Identity = 42.49%
AB0509	1	gi 88703630 ref ZP_01101346.1	gamma proteobacterium KT 71	E-value = 7.00E-19	Identity = 57.14%
	2	gi 149927004 ref ZP_01915262.1	Limnobacter sp. MED105	E-value = 6.00E-18	Identity = 57.83%
	3	gi 94499936 ref ZP_01306471.1	Oceanobacter sp. RED65	E-value = 1.00E-17	Identity = 53.01%
	4	gi 88797307 ref ZP_01112897.1	Reinekea sp. MED297	E-value = 2.00E-17	Identity = 54.88%
	5	gi 118755048 ref ZP_01602841.1	Shewanella pealeana ATCC 700345	E-value = 2.00E-17	Identity = 54.22%
AB0510	1	gi 152990276 ref YP_001355998.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-56	Identity = 54.84%
	2	gi 78777655 ref YP_393970.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-56	Identity = 54.38%
	3	gi 152992735 ref YP_001358456.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-48	Identity = 48.15%
	4	gi 34557290 ref NP_907105.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-48	Identity = 51.16%
	5	gi 34558101 ref NP_907916.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-43	Identity = 44.19%
AB0511	1	gi 152990277 ref YP_001355999.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-95	Identity = 40.64%
	2	gi 152992734 ref YP_001358455.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-91	Identity = 37.03%
AB0512	1	gi 152993380 ref YP_001359101.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-32	Identity = 50.94%
	2	gi 83719940 ref YP_441733.1	Burkholderia thailandensis E264	E-value = 4.00E-28	Identity = 42.86%
	3	gi 37525215 ref NP_928559.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 4.00E-28	Identity = 46.36%
	4	gi 53720570 ref YP_109556.1	Burkholderia pseudomallei K96243	E-value = 7.00E-28	Identity = 41.83%
	5	gi 154493701 ref ZP_02033021.1	Parabacteroides merdae ATCC 43184	E-value = 8.00E-28	Identity = 45.33%
AB0513	1	gi 154148988 ref YP_001407157.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-166	Identity = 64.75%
	2	gi 118475354 ref YP_891804.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-156	Identity = 62.78%
	3	gi 152992028 ref YP_001357749.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-154	Identity = 60.75%
	4	gi 78777703 ref YP_394018.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-152	Identity = 60.71%
	5	gi 157164110 ref YP_001467278.1	Campylobacter concisus 13826	E-value = 8.00E-143	Identity = 57.02%
AB0514	1	gi 152991025 ref YP_001356747.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 66.99%
	2	gi 78776979 ref YP_393294.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 62.89%
	3	gi 152993379 ref YP_001359100.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 61.55%
	4	gi 118474979 ref YP_891786.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 60.89%
	5	gi 154173836 ref YP_001407768.1	Campylobacter curvus 525.92	E-value = 0	Identity = 60.86%
AB0516	1	gi 152990000 ref YP_001355722.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-24	Identity = 60.44%
	2	gi 78776531 ref YP_392846.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-23	Identity = 53.26%
	3	gi 149195166 ref ZP_01872257.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-21	Identity = 53.85%
	4	gi 157165751 ref YP_001467687.1	Campylobacter concisus 13826	E-value = 1.00E-20	Identity = 51.09%
	5	gi 152993863 ref YP_001359584.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-20	Identity = 48.91%
AB0517	1	gi 152993862 ref YP_001359583.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-24	Identity = 37.89%
	2	gi 152990001 ref YP_001355723.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-21	Identity = 33.70%
	3	gi 34558001 ref NP_907816.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-20	Identity = 30.39%
	4	gi 78776532 ref YP_392847.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-17	Identity = 32.93%
	5	gi 32267365 ref NP_861397.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-16	Identity = 28.65%
AB0518	1	gi 78776533 ref YP_392848.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-117	Identity = 50.93%
	2	gi 34558000 ref NP_907815.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-109	Identity = 48.43%
	3	gi 152993861 ref YP_001359582.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-107	Identity = 46.76%
	4	gi 118475066 ref YP_891273.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-102	Identity = 48.60%
	5	gi 152990002 ref YP_001355724.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-102	Identity = 46.52%
AB0520	1	gi 78776966 ref YP_393281.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-72	Identity = 58.47%
	2	gi 34557051 ref NP_906866.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-68	Identity = 50.16%
	3	gi 89093161 ref ZP_01166111.1	Oceanospirillum sp. MED92	E-value = 1.00E-56	Identity = 42.63%
	4	gi 156741941 ref YP_001432070.1	Roseiflexus castenholzii DSM 13941	E-value = 2.00E-54	Identity = 42.01%

	5	gi 120553315 ref YP_957666.1	Marinobacter aquaeolei VT8	E-value = 5.00E-53	Identity = 40.00%
AB0521	1	gi 152989892 ref YP_001355614.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-148	Identity = 73.45%
	2	gi 149194528 ref ZP_01871624.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-144	Identity = 72.86%
	3	gi 78777477 ref YP_393792.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-140	Identity = 70.21%
	4	gi 152992743 ref YP_001358464.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-135	Identity = 66.28%
	5	gi 24216672 ref NP_714153.1	Leptospira interrogans serovar Lai str. 56601	E-value = 1.00E-111	Identity = 58.33%
AB0522	1	gi 34496389 ref NP_900604.1	Chromobacterium violaceum ATCC 12472	E-value = 8.00E-110	Identity = 44.03%
	2	gi 50119010 ref YP_048177.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 3.00E-108	Identity = 43.35%
	3	gi 77457489 ref YP_346994.1	Pseudomonas fluorescens PFO-1	E-value = 3.00E-104	Identity = 45.17%
	4	gi 71736800 ref YP_276152.1	Pseudomonas syringae pv. phaseolicola 1448A	E-value = 6.00E-104	Identity = 46.22%
	5	gi 104780367 ref YP_606865.1	Pseudomonas entomophila L48	E-value = 1.00E-103	Identity = 45.04%
AB0523	1	gi 78484423 ref YP_390348.1	Thiomicrospira crunogena XCL-2	E-value = 4.00E-77	Identity = 27.74%
	2	gi 78776470 ref YP_392785.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-75	Identity = 31.67%
	3	gi 34557844 ref NP_907659.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-42	Identity = 27.55%
AB0524	1	gi 152992332 ref YP_001358053.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-42	Identity = 64.57%
AB0525	1	gi 86360197 ref YP_472086.1	Rhizobium etli CFN 42	E-value = 7.00E-69	Identity = 34.55%
	2	gi 78047258 ref YP_363433.1	Xanthomonas campestris pv. vesicatoria str. 85-10	E-value = 2.00E-68	Identity = 31.61%
	3	gi 34557253 ref NP_907068.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-65	Identity = 32.91%
	4	gi 116254843 ref YP_770679.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 3.00E-63	Identity = 34.54%
	5	gi 78047496 ref YP_363671.1	Xanthomonas campestris pv. vesicatoria str. 85-10	E-value = 8.00E-45	Identity = 25.89%
AB0526	1	gi 152990434 ref YP_001356156.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-26	Identity = 51.67%
	2	gi 15792294 ref NP_282117.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 6.00E-24	Identity = 47.93%
	3	gi 86150971 ref ZP_01069187.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-23	Identity = 47.93%
	4	gi 153951051 ref YP_001397943.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-23	Identity = 46.28%
	5	gi 57242367 ref ZP_00370306.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-23	Identity = 52.68%
AB0527	1	gi 32266204 ref NP_860236.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-14	Identity = 32.48%
	2	gi 152991241 ref YP_001356963.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-13	Identity = 30.43%
	3	gi 34556636 ref NP_906451.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-12	Identity = 25.30%
	4	gi 149195095 ref ZP_01872187.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-11	Identity = 35.58%
	5	gi 109947539 ref YP_664767.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-11	Identity = 28.40%
AB0528	1	gi 152990782 ref YP_001356504.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-109	Identity = 51.65%
	2	gi 78777518 ref YP_393833.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-104	Identity = 49.87%
	3	gi 152992200 ref YP_001357921.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-100	Identity = 47.49%
	4	gi 32266848 ref NP_860880.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-90	Identity = 47.65%
	5	gi 154174982 ref YP_001408446.1	Campylobacter curvus 525.92	E-value = 8.00E-90	Identity = 47.16%
AB0529	1	gi 77919222 ref YP_357037.1	Pelobacter carbinolicus DSM 2380	E-value = 2.00E-91	Identity = 50.28%
	2	gi 56460805 ref YP_156086.1	Idiomarina loihiensis L2TR	E-value = 4.00E-87	Identity = 49.58%
	3	gi 88796571 ref ZP_01112235.1	Alteromonas macleodii 'Deep ecotype'	E-value = 1.00E-86	Identity = 49.41%
	4	gi 85712482 ref ZP_01043531.1	Idiomarina baltica OS145	E-value = 2.00E-86	Identity = 49.00%
	5	gi 116220881 ref ZP_01486301.1	Vibrio cholerae V51	E-value = 4.00E-86	Identity = 44.65%
AB0530	1	gi 34556576 ref NP_906391.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-53	Identity = 47.78%
	2	gi 24213214 ref NP_710695.1	Leptospira interrogans serovar Lai str. 56601	E-value = 2.00E-34	Identity = 33.92%
	3	gi 78778144 ref YP_394459.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-32	Identity = 32.52%
	4	gi 110640174 ref YP_680384.1	Cytophaga hutchinsonii ATCC 33406	E-value = 2.00E-32	Identity = 32.87%
	5	gi 116330189 ref YP_799907.1	Leptospira borgpetersenii serovar Hardjo-bovis JB197	E-value = 2.00E-32	Identity = 33.10%
AB0531	1	gi 152991708 ref YP_001357429.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-116	Identity = 56.53%
	2	gi 78776456 ref YP_392771.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-110	Identity = 52.61%
	3	gi 152991374 ref YP_001357096.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-109	Identity = 51.75%
	4	gi 86152476 ref ZP_01070681.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 3.00E-82	Identity = 43.78%

AB0532	5	gi 57238543 ref YP_179674.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-82	Identity = 43.03%
	1		*** No matches found ***		
AB0533	1	gi 154173805 ref YP_001408798.1	Campylobacter curvus 525.92	E-value = 8.00E-94	Identity = 65.98%
	2	gi 157165487 ref YP_001466356.1	Campylobacter concisus 13826	E-value = 5.00E-92	Identity = 66.39%
	3	gi 118474467 ref YP_892648.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-87	Identity = 62.70%
	4	gi 78777588 ref YP_393903.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-85	Identity = 62.10%
	5	gi 57240739 ref ZP_00368687.1	Campylobacter lari RM2100	E-value = 2.00E-82	Identity = 59.51%
AB0534	1	gi 114045828 ref YP_736378.1	Shewanella sp. MR-7	E-value = 2.00E-30	Identity = 46.79%
	2	gi 146294725 ref YP_001185149.1	Shewanella putrefaciens CN-32	E-value = 5.00E-30	Identity = 46.58%
	3	gi 113971955 ref YP_735748.1	Shewanella sp. MR-4	E-value = 6.00E-30	Identity = 46.79%
	4	gi 126176231 ref YP_001052380.1	Shewanella baltica OS155	E-value = 7.00E-30	Identity = 47.20%
	5	gi 149114283 ref ZP_01841037.1	Shewanella baltica OS223	E-value = 8.00E-30	Identity = 48.72%
AB0535	1		*** No matches found ***		
AB0536	1	gi 34557209 ref NP_907024.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-10	Identity = 32.61%
AB0537	1	gi 34556640 ref NP_906455.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-104	Identity = 75.69%
	2	gi 118474889 ref YP_892581.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-103	Identity = 72.05%
	3	gi 157164805 ref YP_001467386.1	Campylobacter concisus 13826	E-value = 5.00E-102	Identity = 70.72%
	4	gi 154174229 ref YP_001407659.1	Campylobacter curvus 525.92	E-value = 9.00E-101	Identity = 70.54%
	5	gi 57168060 ref ZP_00367199.1	Campylobacter coli RM2228	E-value = 1.00E-100	Identity = 71.32%
AB0538	1	gi 57168059 ref ZP_00367198.1	Campylobacter coli RM2228	E-value = 2.00E-98	Identity = 58.54%
	2	gi 153952055 ref YP_001397723.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-97	Identity = 58.54%
	3	gi 57240504 ref ZP_00368453.1	Campylobacter lari RM2100	E-value = 2.00E-96	Identity = 56.98%
	4	gi 86150416 ref ZP_01068642.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 3.00E-96	Identity = 58.26%
	5	gi 86152846 ref ZP_01071051.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 3.00E-96	Identity = 58.26%
AB0539	1	gi 154173986 ref YP_001407661.1	Campylobacter curvus 525.92	E-value = 3.00E-70	Identity = 65.88%
	2	gi 157164016 ref YP_001467384.1	Campylobacter concisus 13826	E-value = 5.00E-69	Identity = 68.27%
	3	gi 118474231 ref YP_892579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-68	Identity = 62.98%
	4	gi 78777993 ref YP_394308.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-65	Identity = 63.64%
	5	gi 154148688 ref YP_001406402.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-63	Identity = 60.85%
AB0540	1		*** No matches found ***		
AB0541	1	gi 152993786 ref YP_001359507.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-64	Identity = 62.00%
	2	gi 152991239 ref YP_001356961.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-52	Identity = 52.24%
	3	gi 78777990 ref YP_394305.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-52	Identity = 54.19%
	4	gi 154173927 ref YP_001407665.1	Campylobacter curvus 525.92	E-value = 2.00E-51	Identity = 51.74%
	5	gi 157164565 ref YP_001467381.1	Campylobacter concisus 13826	E-value = 6.00E-51	Identity = 52.24%
AB0542	1	gi 34557353 ref NP_907168.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-61	Identity = 35.58%
	2	gi 78777182 ref YP_393497.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-54	Identity = 29.66%
	3	gi 152990819 ref YP_001356541.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-48	Identity = 29.40%
	4	gi 85711301 ref ZP_01042360.1	Idiomarina baltica OS145	E-value = 3.00E-46	Identity = 31.62%
	5	gi 56460645 ref YP_155926.1	Idiomarina loihiensis L2TR	E-value = 1.00E-45	Identity = 30.50%
AB0543	1	gi 152991194 ref YP_001356916.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 50.86%
	2	gi 152993513 ref YP_001359234.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 49.57%
	3	gi 78776775 ref YP_393090.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 51.52%
	4	gi 34558447 ref NP_908262.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 49.01%
	5	gi 118475762 ref YP_892559.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 48.59%
AB0544	1	gi 15612155 ref NP_223807.1	Helicobacter pylori J99	E-value = 3.00E-06	Identity = 45.16%
	2	gi 109947840 ref YP_665068.1	Helicobacter acinonychis str. Sheeba	E-value = 4.00E-06	Identity = 44.62%
AB0545	1	gi 78776777 ref YP_393092.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-10	Identity = 47.92%
	2	gi 120601385 ref YP_965785.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 3.00E-07	Identity = 42.86%



	3	gi 32267016 ref NP_861048.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-07	Identity = 46.51%
	4	gi 46581444 ref YP_012252.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 9.00E-07	Identity = 41.76%
	5	gi 1705528 sp P00120 CY553_DESVM	Desulfovibrio vulgaris	E-value = 2.00E-06	Identity = 37.86%
AB0546	1	gi 152990613 ref YP_001356335.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-57	Identity = 61.38%
	2	gi 78776685 ref YP_393000.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-48	Identity = 52.91%
	3	gi 82523980 emb CAI78791.1	uncultured epsilon proteobacterium	E-value = 1.00E-44	Identity = 51.34%
	4	gi 121533977 ref ZP_01665803.1	Thermosinus carboxydivorans Nor1	E-value = 3.00E-25	Identity = 35.44%
	5	gi 77979678 ref ZP_00835095.1	Yersinia intermedia ATCC 29909	E-value = 8.00E-25	Identity = 33.01%
AB0547	1	hemH gi 152990483 ref YP_001356205.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-77	Identity = 49.84%
	2	gi 78777116 ref YP_393431.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-76	Identity = 48.56%
	3	gi 34558436 ref NP_908251.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-71	Identity = 47.13%
	4	gi 154148514 ref YP_001406549.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-69	Identity = 49.52%
	5	gi 157164099 ref YP_001467068.1	Campylobacter concisus 13826	E-value = 4.00E-68	Identity = 48.69%
AB0548	1	feoB1 gi 152992399 ref YP_001358120.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 63.75%
	2	gi 78777955 ref YP_394270.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 61.35%
	3	gi 34557344 ref NP_907159.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 58.91%
	4	gi 154149133 ref YP_001406037.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 54.35%
	5	gi 57240816 ref ZP_00368764.1	Campylobacter lari RM2100	E-value = 0	Identity = 53.8%
AB0549	1		*** No matches found ***		
AB0550	1	gi 152992958 ref YP_001358679.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-54	Identity = 46.00%
	2	gi 152993138 ref YP_001358859.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-42	Identity = 38.31%
	3	gi 90579519 ref ZP_01235328.1	Vibrio angustum S14	E-value = 1.00E-41	Identity = 40.78%
	4	gi 149911645 ref ZP_01900255.1	Moritella sp. PE36	E-value = 3.00E-40	Identity = 40.00%
	5	gi 116190004 ref ZP_01479747.1	Vibrio cholerae MO10	E-value = 6.00E-40	Identity = 37.70%
AB0551	1	gi 152992655 ref YP_001358376.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-75	Identity = 59.18%
	2	gi 34557677 ref NP_907492.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-61	Identity = 50.00%
	3	gi 154174193 ref YP_001407418.1	Campylobacter curvus 525.92	E-value = 2.00E-59	Identity = 51.76%
	4	gi 154148800 ref YP_001406105.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-59	Identity = 53.09%
	5	gi 157164968 ref YP_001465982.1	Campylobacter concisus 13826	E-value = 2.00E-56	Identity = 54.62%
AB0552	1	gi 152992654 ref YP_001358375.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-61	Identity = 62.60%
	2	gi 118474931 ref YP_892846.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-60	Identity = 58.27%
	3	gi 157164381 ref YP_001465983.1	Campylobacter concisus 13826	E-value = 1.00E-56	Identity = 59.52%
	4	gi 154174616 ref YP_001407419.1	Campylobacter curvus 525.92	E-value = 1.00E-56	Identity = 57.94%
	5	gi 116750161 ref YP_846848.1	Syntrophobacter fumaroxidans MPOB	E-value = 3.00E-53	Identity = 49.24%
AB0553	1	gi 78776513 ref YP_392828.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-65	Identity = 51.08%
	2	gi 152993436 ref YP_001359157.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-65	Identity = 49.10%
	3	gi 156862505 gb EDO55936.1	Bacteroides uniformis ATCC 8492	E-value = 9.00E-51	Identity = 42.55%
	4	gi 53711833 ref YP_097825.1	Bacteroides fragilis YCH46	E-value = 1.00E-48	Identity = 40.88%
	5	gi 29347915 ref NP_811418.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 2.00E-48	Identity = 40.88%
AB0554	1	tpx gi 34557922 ref NP_907737.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-52	Identity = 63.64%
	2	gi 154174915 ref YP_001409037.1	Campylobacter curvus 525.92	E-value = 3.00E-51	Identity = 63.84%
	3	gi 149194723 ref ZP_01871818.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-46	Identity = 63.06%
	4	gi 118475243 ref YP_892893.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-46	Identity = 58.18%
	5	gi 154148995 ref YP_001407293.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-46	Identity = 59.52%
AB0555	1	gi 34556817 ref NP_906632.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-33	Identity = 37.55%
	2	gi 108563461 ref YP_627777.1	Helicobacter pylori HPAG1	E-value = 2.00E-29	Identity = 35.71%
	3	gi 15612089 ref NP_223741.1	Helicobacter pylori J99	E-value = 2.00E-29	Identity = 35.71%
	4	gi 109947046 ref YP_664274.1	Helicobacter acinonychis str. Sheeba	E-value = 3.00E-29	Identity = 34.45%
	5	gi 15645712 ref NP_207889.1	Helicobacter pylori 26695	E-value = 2.00E-28	Identity = 34.45%

AB0556	1	gi 55977160 gb AAV68375.1	Hermiimonas arsenicoxydans	E-value = 9.00E-80	Identity = 55.56%
	2	gi 134094807 ref YP_001099882.1	Hermiimonas arsenicoxydans	E-value = 2.00E-78	Identity = 55.49%
	3	gi 134093767 ref YP_001098842.1	Hermiimonas arsenicoxydans	E-value = 1.00E-75	Identity = 52.94%
	4	gi 146293062 ref YP_001183486.1	Shewanella putrefaciens CN-32	E-value = 2.00E-75	Identity = 59.29%
	5	gi 58039157 ref YP_191121.1	Gluconobacter oxydans 621H	E-value = 1.00E-73	Identity = 49.21%
AB0558	1	gi 154174485 ref YP_001409036.1	Campylobacter curvus 525.92	E-value = 5.00E-67	Identity = 48.85%
	2	gi 152992825 ref YP_001358546.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-42	Identity = 32.65%
	3	gi 152989874 ref YP_001355596.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-30	Identity = 34.78%
AB0559	1	gi 34558055 ref NP_907870.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-98	Identity = 57.05%
	2	gi 57242529 ref ZP_00370467.1	Campylobacter upsaliensis RM3195	E-value = 9.00E-91	Identity = 57.72%
	3	gi 57237434 ref YP_178447.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-90	Identity = 57.05%
	4	gi 15791746 ref NP_281569.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 6.00E-90	Identity = 56.71%
	5	gi 86153952 ref ZP_01072155.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 7.00E-90	Identity = 56.71%
AB0560	1	gi 149910401 ref ZP_01899043.1	Moritella sp. PE36	E-value = 5.00E-16	Identity = 36.63%
	2	gi 87118570 ref ZP_01074469.1	Marinomonas sp. MED121	E-value = 1.00E-14	Identity = 29.79%
	3	gi 116626574 ref YP_828730.1	Solibacter usitatus Ellin6076	E-value = 4.00E-14	Identity = 28.00%
	4	gi 90413960 ref ZP_01221945.1	Photobacterium profundum 3TCK	E-value = 7.00E-14	Identity = 32.56%
	5	gi 157375119 ref YP_001473719.1	Shewanella sediminis HAW-EB3	E-value = 7.00E-14	Identity = 35.80%
AB0561	1 rep	gi 78776939 ref YP_393254.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 59.88%
	2	gi 34557966 ref NP_907781.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 57.96%
	3	gi 152990757 ref YP_001356479.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 56.3%
	4	gi 154175325 ref YP_001408248.1	Campylobacter curvus 525.92	E-value = 0	Identity = 56.74%
	5	gi 157163928 ref YP_001466843.1	Campylobacter concisus 13826	E-value = 0	Identity = 55.6%
AB0562	1	gi 34557699 ref NP_907514.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-66	Identity = 42.52%
	2	gi 78778138 ref YP_394453.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-63	Identity = 42.78%
	3	gi 152991395 ref YP_001357117.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-57	Identity = 41.58%
	4	gi 154175252 ref YP_001408977.1	Campylobacter curvus 525.92	E-value = 2.00E-56	Identity = 37.53%
	5	gi 78776369 ref YP_392684.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-55	Identity = 41.10%
AB0563	1 soxC	gi 78778254 ref YP_394569.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-175	Identity = 68.32%
	2	gi 152991645 ref YP_001357366.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-167	Identity = 66.21%
	3	gi 89094214 ref ZP_01167156.1	Oceanospirillum sp. MED92	E-value = 8.00E-119	Identity = 51.62%
	4	gi 88704850 ref ZP_01102563.1	gamma proteobacterium KT 71	E-value = 8.00E-112	Identity = 52.51%
	5	gi 149120191 ref ZP_01846649.1	Methylobacterium sp. 4-46	E-value = 8.00E-110	Identity = 50.00%
AB0564	1 soxD	gi 152991646 ref YP_001357367.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-86	Identity = 47.12%
	2	gi 78778253 ref YP_394568.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-80	Identity = 44.65%
	3	gi 89094213 ref ZP_01167155.1	Oceanospirillum sp. MED92	E-value = 4.00E-47	Identity = 34.42%
	4	gi 88704849 ref ZP_01102562.1	gamma proteobacterium KT 71	E-value = 1.00E-42	Identity = 34.62%
	5	gi 83943683 ref ZP_00956141.1	Sulfitobacter sp. EE-36	E-value = 2.00E-27	Identity = 31.46%
AB0565	1 soxX	gi 78484949 ref YP_390874.1	Thiomicrospira crunogena XCL-2	E-value = 3.00E-12	Identity = 36.36%
	2	gi 146343608 ref YP_001208656.1	Bradyrhizobium sp. ORS278	E-value = 1.00E-10	Identity = 35.58%
	3	gi 145218965 ref YP_001129674.1	Prosthecochloris vibrioformis DSM 265	E-value = 1.00E-10	Identity = 35.83%
	4	gi 21673843 ref NP_661908.1	Chlorobium tepidum TLS	E-value = 4.00E-10	Identity = 40.17%
	5	gi 149120189 ref ZP_01846647.1	Methylobacterium sp. 4-46	E-value = 2.00E-09	Identity = 37.14%
AB0566	1 soxY	gi 152991647 ref YP_001357368.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-31	Identity = 50.98%
	2	gi 78778252 ref YP_394567.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-31	Identity = 52.67%
	3	gi 21673844 ref NP_661909.1	Chlorobium tepidum TLS	E-value = 6.00E-21	Identity = 43.23%
	4	gi 27376124 ref NP_767653.1	Bradyrhizobium japonicum USDA 110	E-value = 1.00E-19	Identity = 43.66%
	5	gi 149120188 ref ZP_01846646.1	Methylobacterium sp. 4-46	E-value = 1.00E-18	Identity = 44.52%
AB0567	1 soxZ	gi 78778251 ref YP_394566.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-14	Identity = 52.08%

	2	gi 153873204 ref ZP_02001863.1	Beggiatoa sp. PS	E-value = 1.00E-12	Identity = 45.54%
	3	gi 71908744 ref YP_286331.1	Dechloromonas aromatica RCB	E-value = 6.00E-11	Identity = 45.26%
	4	gi 152991648 ref YP_001357369.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-11	Identity = 47.67%
	5	gi 21673845 ref NP_661910.1	Chlorobium tepidum TLS	E-value = 9.00E-11	Identity = 40.21%
AB0568	1	soxA gi 78189878 ref YP_380216.1	Chlorobium chlorochromatii CaD3	E-value = 4.00E-54	Identity = 45.78%
	2	gi 21673846 ref NP_661911.1	Chlorobium tepidum TLS	E-value = 2.00E-53	Identity = 39.00%
	3	gi 145218962 ref YP_001129671.1	Prosthecochloris vibrioformis DSM 265	E-value = 6.00E-52	Identity = 38.91%
	4	gi 19879578 gb AAL68886.1	Chlorobium limicola	E-value = 1.00E-51	Identity = 42.80%
	5	gi 68549173 ref ZP_00588640.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 8.00E-51	Identity = 39.37%
AB0569	1		<b>*** No matches found ***</b>		
AB0570	1	soxB gi 21673848 ref NP_661913.1	Chlorobium tepidum TLS	E-value = 0	Identity = 57.53%
	2	gi 153871310 ref ZP_02000515.1	Beggiatoa sp. PS	E-value = 0	Identity = 55.65%
	3	gi 145218960 ref YP_001129669.1	Prosthecochloris vibrioformis DSM 265	E-value = 0	Identity = 56.68%
	4	gi 68549175 ref ZP_00588642.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 0	Identity = 56.29%
	5	gi 19879580 gb AAL68888.1	Chlorobium limicola	E-value = 0	Identity = 56.34%
AB0571	1	gi 152992100 ref YP_001357821.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-37	Identity = 35.77%
	2	gi 152991565 ref YP_001357287.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-35	Identity = 33.97%
	3	gi 152992101 ref YP_001357822.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-32	Identity = 34.21%
	4	gi 152993435 ref YP_001359156.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-25	Identity = 33.08%
AB0572	1	gi 55981296 ref YP_144593.1	Thermus thermophilus HB8	E-value = 8.00E-26	Identity = 43.33%
	2	gi 46199265 ref YP_004932.1	Thermus thermophilus HB27	E-value = 3.00E-25	Identity = 41.80%
	3	gi 78778255 ref YP_394570.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-21	Identity = 40.35%
	4	gi 153811137 ref ZP_01963805.1	Ruminococcus obeum ATCC 29174	E-value = 1.00E-09	Identity = 29.01%
	5	gi 154504510 ref ZP_02041248.1	Ruminococcus gnavus ATCC 29149	E-value = 5.00E-09	Identity = 30.15%
AB0573	1	gi 152992102 ref YP_001357823.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-29	Identity = 43.36%
	2	gi 152991564 ref YP_001357286.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-27	Identity = 43.17%
	3	gi 144899374 emb CAM76238.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 7.00E-23	Identity = 42.74%
	4	gi 78776468 ref YP_392783.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-18	Identity = 36.69%
	5	gi 78484892 ref YP_390817.1	Thiomicrospira crunogena XCL-2	E-value = 5.00E-09	Identity = 28.57%
AB0574	1		<b>*** No matches found ***</b>		
AB0576	1	pfpI gi 94309255 ref YP_582465.1	Ralstonia metallidurans CH34	E-value = 6.00E-74	Identity = 67.20%
	2	gi 73540068 ref YP_294588.1	Ralstonia eutropha JMP134	E-value = 1.00E-73	Identity = 67.20%
	3	gi 118038911 ref ZP_01510314.1	Burkholderia phytofirmans PsJN	E-value = 4.00E-71	Identity = 66.49%
	4	gi 119510731 ref ZP_01629858.1	Nodularia spumigena CCY9414	E-value = 4.00E-71	Identity = 62.70%
	5	gi 120555856 ref YP_960207.1	Marinobacter aquaeolei VT8	E-value = 8.00E-71	Identity = 65.41%
AB0578	1	gi 152991649 ref YP_001357370.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-77	Identity = 48.99%
	2	gi 78778250 ref YP_394565.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-76	Identity = 51.76%
	3	gi 152992099 ref YP_001357820.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-70	Identity = 45.72%
	4	gi 152990188 ref YP_001355910.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-45	Identity = 34.45%
	5	gi 68549368 ref ZP_00588833.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 3.00E-23	Identity = 28.43%
AB0579	1	gi 150017891 ref YP_001310145.1	Clostridium beijerinckii NCIMB 8052	E-value = 5.00E-37	Identity = 29.78%
	2	gi 15895797 ref NP_349146.1	Clostridium acetobutylicum ATCC 824	E-value = 3.00E-35	Identity = 28.47%
	3	gi 118444989 ref YP_878971.1	Clostridium novyi NT	E-value = 5.00E-21	Identity = 28.61%
	4	gi 20806580 ref NP_621751.1	Thermoanaerobacter tengcongensis MB4	E-value = 6.00E-19	Identity = 25.63%
	5	gi 78043440 ref YP_359007.1	Carboxydotherrmus hydrogenoformans Z-2901	E-value = 1.00E-18	Identity = 25.64%
AB0580	1	gi 152992706 ref YP_001358427.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-50	Identity = 40.53%
	2	gi 152992760 ref YP_001358481.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-47	Identity = 45.70%
AB0581	1	va/S gi 78776936 ref YP_393251.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 70.22%
	2	gi 152992964 ref YP_001358685.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 67.59%

	3	gi 152990758 ref YP_001356480.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 66.36%
	4	gi 157164498 ref YP_001466839.1	Campylobacter concisus 13826	E-value = 0	Identity = 62.38%
	5	gi 154174900 ref YP_001408244.1	Campylobacter curvus 525.92	E-value = 0	Identity = 64.9%
AB0582	1		<b>*** No matches found ***</b>		
AB0583	1	gi 150400259 ref YP_001324026.1	Methanococcus vannielii SB	E-value = 1.00E-15	Identity = 77.78%
	2	gi 157400869 gb EDO67132.1	Methanococcus maripaludis C6	E-value = 2.00E-15	Identity = 77.78%
	3	gi 89205320 ref ZP_01183891.1	Bacillus weihenstephanensis KBAB4	E-value = 3.00E-15	Identity = 76.19%
	4	gi 30022616 ref NP_834247.1	Bacillus cereus ATCC 14579	E-value = 4.00E-15	Identity = 76.19%
	5	gi 45358234 ref NP_987791.1	Methanococcus maripaludis S2	E-value = 5.00E-15	Identity = 76.19%
AB0584	1		<b>*** No matches found ***</b>		
AB0585	1	gi 152991372 ref YP_001357094.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-113	Identity = 50.68%
	2	gi 34558097 ref NP_907912.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-110	Identity = 51.60%
	3	gi 78776271 ref YP_392586.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-107	Identity = 52.29%
	4	gi 118474240 ref YP_891389.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-103	Identity = 49.54%
	5	gi 32267113 ref NP_861145.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-103	Identity = 47.06%
AB0586	1	gi 152991764 ref YP_001357485.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-53	Identity = 56.78%
	2	gi 78776272 ref YP_392587.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-50	Identity = 55.28%
	3	gi 152991371 ref YP_001357093.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-50	Identity = 59.18%
	4	gi 34558098 ref NP_907913.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-50	Identity = 48.47%
	5	gi 149195344 ref ZP_01872431.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-50	Identity = 54.82%
AB0587	1		<b>*** No matches found ***</b>		
AB0588	1		<b>*** No matches found ***</b>		
AB0589	1		<b>*** No matches found ***</b>		
AB0590	1	<i>proC</i> gi 152993344 ref YP_001359065.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-60	Identity = 50.60%
	2	gi 78776990 ref YP_393305.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-59	Identity = 50.20%
	3	gi 152991093 ref YP_001356815.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-51	Identity = 49.80%
	4	gi 149193816 ref ZP_01870914.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-49	Identity = 45.42%
	5	gi 34558263 ref NP_908078.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-49	Identity = 46.22%
AB0591	1	gi 152991092 ref YP_001356814.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-43	Identity = 42.79%
	2	gi 152993490 ref YP_001359211.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-42	Identity = 43.87%
	3	gi 34558261 ref NP_908076.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-40	Identity = 41.71%
	4	gi 109946693 ref YP_663921.1	Helicobacter acinonychis str. Sheeba	E-value = 8.00E-39	Identity = 37.32%
	5	gi 15645988 ref NP_208169.1	Helicobacter pylori 26695	E-value = 3.00E-37	Identity = 36.92%
AB0592	1	<i>lon</i> gi 152991091 ref YP_001356813.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 62.11%
	2	gi 34558260 ref NP_908075.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 61.49%
	3	gi 157164570 ref YP_001467201.1	Campylobacter concisus 13826	E-value = 0	Identity = 60.5%
	4	gi 78776615 ref YP_392930.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 60.62%
	5	gi 154173725 ref YP_001407992.1	Campylobacter curvus 525.92	E-value = 0	Identity = 59.5%
AB0593	1	gi 154147965 ref YP_001406479.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-25	Identity = 46.47%
	2	gi 118474503 ref YP_892056.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-24	Identity = 47.65%
	3	gi 154174587 ref YP_001408255.1	Campylobacter curvus 525.92	E-value = 6.00E-24	Identity = 52.00%
	4	gi 157165578 ref YP_001466851.1	Campylobacter concisus 13826	E-value = 3.00E-22	Identity = 42.26%
	5	gi 57168869 ref ZP_00367999.1	Campylobacter coli RM2228	E-value = 2.00E-20	Identity = 46.67%
AB0594	1	gi 34557684 ref NP_907499.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-40	Identity = 53.10%
	2	gi 32267262 ref NP_861294.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-34	Identity = 51.05%
	3	gi 86132703 ref ZP_01051295.1	Cellulophaga sp. MED134	E-value = 4.00E-27	Identity = 46.05%
	4	gi 118476160 ref YP_893311.1	Bacillus thuringiensis str. Al Hakam	E-value = 5.00E-27	Identity = 46.21%
	5	gi 52144839 ref YP_081990.1	Bacillus cereus E33L	E-value = 6.00E-27	Identity = 46.21%
AB0595	1	gi 68550325 ref ZP_00589776.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 2.00E-66	Identity = 37.58%

	2	gi 78188842 ref YP_379180.1	Chlorobium chlorochromatii CaD3	E-value = 5.00E-63	Identity = 35.59%
	3	gi 23128792 ref ZP_00110631.1	Nostoc punctiforme PCC 73102	E-value = 2.00E-17	Identity = 25.77%
	4	gi 113477368 ref YP_723429.1	Trichodesmium erythraeum IMS101	E-value = 7.00E-14	Identity = 25.74%
	5	gi 52548589 gb AAU82438.1	uncultured archaeon GZfos17F1	E-value = 5.00E-07	Identity = 25.07%
AB0596	1		*** No matches found ***		
AB0597	1	gi 91223048 ref ZP_01258314.1	Vibrio alginolyticus 12G01	E-value = 4.00E-27	Identity = 47.69%
	2	gi 91794509 ref YP_564160.1	Shewanella denitrificans OS217	E-value = 8.00E-27	Identity = 44.88%
	3	gi 153832557 ref ZP_01985224.1	Vibrio harveyi HY01	E-value = 1.00E-26	Identity = 46.92%
	4	gi 117619751 ref YP_858079.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 2.00E-26	Identity = 42.03%
	5	gi 116187079 ref ZP_01476969.1	Vibrio sp. Ex25	E-value = 2.00E-26	Identity = 47.69%
AB0598	1	gi 84358333 ref ZP_00983116.1	Burkholderia dolosa AUO158	E-value = 5.00E-09	Identity = 32.26%
AB0599	1	gi 152993881 ref YP_001359602.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-09	Identity = 47.22%
AB0602	1	gi 87311198 ref ZP_01093321.1	Blastopirellula marina DSM 3645	E-value = 2.00E-97	Identity = 41.53%
	2	gi 118592320 ref ZP_01549712.1	Stappia aggregata IAM 12614	E-value = 5.00E-93	Identity = 38.46%
	3	gi 85713882 ref ZP_01044871.1	Nitrobacter sp. Nb-311A	E-value = 2.00E-89	Identity = 39.03%
	4	gi 91974708 ref YP_567367.1	Rhodopseudomonas palustris BisB5	E-value = 8.00E-89	Identity = 42.26%
	5	gi 39933508 ref NP_945784.1	Rhodopseudomonas palustris CGA009	E-value = 9.00E-89	Identity = 42.48%
AB0603	1	gi 88859208 ref ZP_01133848.1	Pseudoalteromonas tunicata D2	E-value = 4.00E-06	Identity = 45.95%
	2	gi 157165452 ref YP_001467803.1	Campylobacter concisus 13826	E-value = 9.00E-06	Identity = 47.76%
AB0604	1	gi 85703820 ref ZP_01034923.1	Roseovarius sp. 217	E-value = 2.00E-33	Identity = 32.71%
	2	gi 127514037 ref YP_001095234.1	Shewanella loihica PV-4	E-value = 5.00E-33	Identity = 33.57%
	3	gi 149203310 ref ZP_01880280.1	Roseovarius sp. TM1035	E-value = 2.00E-32	Identity = 33.45%
	4	gi 99080441 ref YP_612595.1	Silicibacter sp. TM1040	E-value = 1.00E-31	Identity = 31.02%
	5	gi 28871406 ref NP_794025.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 3.00E-31	Identity = 34.52%
AB0605	1	accC2 gi 78776821 ref YP_393136.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 77.80%
	2	gi 149194561 ref ZP_01871657.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 66.67%
	3	gi 15606634 ref NP_214014.1	Aquifex aeolicus VF5	E-value = 3.00E-161	Identity = 60.27%
	4	gi 156719254 ref ZP_02060897.1	Hydrogenobaculum sp. Y04AAS1	E-value = 7.00E-158	Identity = 60.40%
	5	gi 116234998 dbj BAF34937.1	Hydrogenobacter thermophilus	E-value = 8.00E-154	Identity = 56.71%
AB0606	1	gi 150009188 ref YP_001303931.1	Parabacteroides distasonis ATCC 8503	E-value = 4.00E-19	Identity = 56.12%
	2	gi 60680005 ref YP_210149.1	Bacteroides fragilis NCTC 9343	E-value = 2.00E-18	Identity = 51.52%
	3	gi 85714910 ref ZP_01045896.1	Nitrobacter sp. Nb-311A	E-value = 2.00E-18	Identity = 48.08%
	4	gi 154494084 ref ZP_02033404.1	Parabacteroides merdae ATCC 43184	E-value = 2.00E-18	Identity = 56.12%
	5	gi 156862636 gb EDO56067.1	Bacteroides uniformis ATCC 8492	E-value = 3.00E-18	Identity = 50.51%
AB0607	1	sufE gi 150010126 ref YP_001304869.1	Parabacteroides distasonis ATCC 8503	E-value = 8.00E-24	Identity = 40.15%
	2	gi 110637384 ref YP_677591.1	Cytophaga hutchinsonii ATCC 33406	E-value = 2.00E-23	Identity = 42.54%
	3	gi 150026417 ref YP_001297243.1	Flavobacterium psychrophilum JIP02/86	E-value = 3.00E-23	Identity = 43.94%
	4	gi 120437452 ref YP_863138.1	Gramella forsetii KT0803	E-value = 5.00E-23	Identity = 41.67%
	5	gi 88804367 ref ZP_01119887.1	Robiginitalea biformata HTCC2501	E-value = 6.00E-23	Identity = 39.39%
AB0608	1	sufS gi 88799897 ref ZP_01115469.1	Reinekea sp. MED297	E-value = 5.00E-88	Identity = 43.51%
	2	gi 116695456 ref YP_841032.1	Ralstonia eutropha H16	E-value = 2.00E-87	Identity = 41.12%
	3	gi 88804366 ref ZP_01119886.1	Robiginitalea biformata HTCC2501	E-value = 3.00E-87	Identity = 42.32%
	4	gi 90021064 ref YP_526891.1	Saccharophagus degradans 2-40	E-value = 3.00E-87	Identity = 43.50%
	5	gi 116626730 ref YP_828886.1	Solibacter usitatus Ellin6076	E-value = 3.00E-87	Identity = 41.37%
AB0609	1	sufD gi 152992590 ref YP_001358311.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-27	Identity = 27.32%
	2	gi 90407346 ref ZP_01215531.1	Psychromonas sp. CNPT3	E-value = 1.00E-13	Identity = 27.60%
	3	gi 89256547 ref YP_513909.1	Francisella tularensis subsp. holarctica	E-value = 3.00E-12	Identity = 25.17%
	4	gi 134253681 gb EBA52775.1	Francisella tularensis subsp. holarctica 257	E-value = 3.00E-12	Identity = 25.17%
AB0610	1	sufC gi 152992591 ref YP_001358312.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-70	Identity = 55.14%

	2	gi 114776743 ref ZP_01451786.1	Mariprofundus ferrooxydans PV-1	E-value = 7.00E-70	Identity = 53.31%
	3	gi 116626728 ref YP_828884.1	Solibacter usitatus Ellin6076	E-value = 7.00E-69	Identity = 51.81%
	4	gi 146329287 ref YP_001209735.1	Dichelobacter nodosus VCS1703A	E-value = 2.00E-68	Identity = 51.19%
	5	gi 50120791 ref YP_049958.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 3.00E-68	Identity = 52.28%
AB0611	1	<i>sufB</i> gi 152990761 ref YP_001356483.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 72.36%
	2	gi 120556061 ref YP_960412.1	Marinobacter aquaeolei VT8	E-value = 0	Identity = 70.63%
	3	gi 126665742 ref ZP_01736723.1	Marinobacter sp. ELB17	E-value = 0	Identity = 70%
	4	gi 152992592 ref YP_001358313.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 73.32%
	5	gi 149376032 ref ZP_01893798.1	Marinobacter algicola DG893	E-value = 0	Identity = 70.63%
AB0612	1	<i>iscS</i> gi 34558481 ref NP_908296.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-153	Identity = 66.67%
	2	gi 118475402 ref YP_892816.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-151	Identity = 66.83%
	3	gi 32266063 ref NP_860095.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-149	Identity = 64.77%
	4	gi 157164887 ref YP_001466052.1	Campylobacter concisus 13826	E-value = 1.00E-148	Identity = 63.57%
	5	gi 154173772 ref YP_001407486.1	Campylobacter curvus 525.92	E-value = 2.00E-148	Identity = 63.82%
AB0613	1	<i>iscU</i> gi 157164931 ref YP_001466051.1	Campylobacter concisus 13826	E-value = 8.00E-137	Identity = 73.33%
	2	gi 154173662 ref YP_001407485.1	Campylobacter curvus 525.92	E-value = 1.00E-134	Identity = 73.64%
	3	gi 152991603 ref YP_001357324.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-134	Identity = 74.39%
	4	gi 34558480 ref NP_908295.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-133	Identity = 70.34%
	5	gi 154148924 ref YP_001405665.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-132	Identity = 70.91%
AB0614	1	gi 89900422 ref YP_522893.1	Rhodoferrax ferrireducens T118	E-value = 3.00E-14	Identity = 27.38%
AB0615	1		<b>*** No matches found ***</b>		
AB0616	1	<i>argH</i> gi 152990406 ref YP_001356128.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-167	Identity = 67.04%
	2	gi 78777064 ref YP_393379.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-164	Identity = 65.11%
	3	gi 149194544 ref ZP_01871640.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-159	Identity = 64.96%
	4	gi 34557584 ref NP_907399.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-158	Identity = 62.53%
	5	gi 152992140 ref YP_001357861.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-154	Identity = 61.32%
AB0617	1	<i>cheV</i> gi 34558164 ref NP_907979.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-34	Identity = 28.57%
	2	gi 109947387 ref YP_664615.1	Helicobacter acinonychis str. Sheeba	E-value = 5.00E-27	Identity = 29.49%
	3	gi 108563022 ref YP_627338.1	Helicobacter pylori HPAG1	E-value = 7.00E-26	Identity = 27.88%
	4	gi 32267301 ref NP_861333.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-26	Identity = 26.98%
	5	gi 15645241 ref NP_207411.1	Helicobacter pylori 26695	E-value = 3.00E-25	Identity = 27.24%
AB0618	1	gi 152991062 ref YP_001356784.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-55	Identity = 50.23%
	2	gi 152992896 ref YP_001358617.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-46	Identity = 44.08%
	3	gi 157164942 ref YP_001466446.1	Campylobacter concisus 13826	E-value = 1.00E-45	Identity = 44.55%
	4	gi 149193774 ref ZP_01870872.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-44	Identity = 48.82%
	5	gi 118474392 ref YP_891526.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-44	Identity = 45.45%
AB0619	1	<i>greA</i> gi 108563274 ref YP_627590.1	Helicobacter pylori HPAG1	E-value = 5.00E-44	Identity = 55.97%
	2	gi 15611867 ref NP_223518.1	Helicobacter pylori J99	E-value = 5.00E-44	Identity = 55.97%
	3	gi 109947754 ref YP_664982.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-43	Identity = 56.60%
	4	gi 149194430 ref ZP_01871527.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-42	Identity = 57.32%
	5	gi 32265653 ref NP_859685.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-42	Identity = 54.72%
AB0620	1	gi 152991054 ref YP_001356776.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-42	Identity = 43.44%
	2	gi 152992889 ref YP_001358610.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-39	Identity = 44.50%
	3	gi 57241433 ref ZP_00369379.1	Campylobacter lari RM2100	E-value = 2.00E-32	Identity = 42.98%
	4	gi 7877729 ref YP_394044.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-32	Identity = 37.55%
	5	gi 118474912 ref YP_891531.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-32	Identity = 40.60%
AB0621	1	<i>uvrB</i> gi 152990079 ref YP_001355801.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 71.22%
	2	gi 152993729 ref YP_001359450.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 69.86%
	3	gi 78777891 ref YP_394206.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 70.18%

	4	gi 154174543 ref YP_001408491.1	Campylobacter curvus 525.92	E-value = 0	Identity = 69.35%
	5	gi 34558250 ref NP_908065.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 69.51%
AB0622	1	gi 34557060 ref NP_906875.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-38	Identity = 25.86%
AB0623	1	<i>nth</i> gi 152993389 ref YP_001359110.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-73	Identity = 66.04%
	2	gi 78776716 ref YP_393031.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-73	Identity = 65.09%
	3	gi 149194290 ref ZP_01871387.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-70	Identity = 63.33%
	4	gi 154149294 ref YP_001406776.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-68	Identity = 61.76%
	5	gi 152990308 ref YP_001356030.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-67	Identity = 63.46%
AB0624	1		<b>*** No matches found ***</b>		
AB0625	1	gi 78776578 ref YP_392893.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-155	Identity = 46.95%
	2	gi 152993756 ref YP_001359477.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-153	Identity = 46.29%
	3	gi 34558795 gb AAQ75140.1	Alvinella pompejana epibiont 6C6	E-value = 1.00E-139	Identity = 45.35%
	4	gi 152991362 ref YP_001357084.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-103	Identity = 34.43%
	5	gi 95931381 ref ZP_01314092.1	Desulfuromonas acetoxidans DSM 684	E-value = 3.00E-74	Identity = 29.69%
AB0626	1	gi 70734150 ref YP_257790.1	Pseudomonas fluorescens Pf-5	E-value = 1.00E-150	Identity = 42.34%
	2	gi 126195859 gb EAZ59922.1	Pseudomonas aeruginosa 2192	E-value = 3.00E-144	Identity = 41.99%
	3	gi 84325518 ref ZP_00973553.1	Pseudomonas aeruginosa 2192	E-value = 3.00E-144	Identity = 41.99%
	4	gi 107103310 ref ZP_01367228.1	Pseudomonas aeruginosa PACS2	E-value = 3.00E-144	Identity = 41.99%
	5	gi 15598985 ref NP_252479.1	Pseudomonas aeruginosa PAO1	E-value = 3.00E-144	Identity = 41.99%
AB0627	1		<b>*** No matches found ***</b>		
AB0628	1		<b>*** No matches found ***</b>		
AB0629	1		<b>*** No matches found ***</b>		
AB0630	1	gi 118475245 ref YP_891579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-30	Identity = 33.18%
	2	gi 157164839 ref YP_001466181.1	Campylobacter concisus 13826	E-value = 4.00E-29	Identity = 34.09%
	3	gi 152993952 ref YP_001359673.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-27	Identity = 33.04%
	4	gi 57169075 ref ZP_00368202.1	Campylobacter coli RM2228	E-value = 1.00E-26	Identity = 31.22%
	5	gi 154173869 ref YP_001407525.1	Campylobacter curvus 525.92	E-value = 6.00E-26	Identity = 34.39%
AB0631	1		<b>*** No matches found ***</b>		
AB0632	1	gi 95928655 ref ZP_01311402.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-59	Identity = 27.81%
AB0633	1	gi 34557328 ref NP_907143.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-58	Identity = 32.54%
	2	gi 117619052 ref YP_855577.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 1.00E-52	Identity = 30.90%
	3	gi 144897509 emb CAM74373.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 6.00E-47	Identity = 27.44%
	4	gi 30249816 ref NP_841886.1	Nitrosomonas europaea ATCC 19718	E-value = 5.00E-43	Identity = 27.93%
	5	gi 34557239 ref NP_907054.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-42	Identity = 30.98%
AB0634	1	gi 154174828 ref YP_001407308.1	Campylobacter curvus 525.92	E-value = 3.00E-132	Identity = 62.22%
	2	gi 157164264 ref YP_001465930.1	Campylobacter concisus 13826	E-value = 3.00E-131	Identity = 63.12%
	3	gi 118474660 ref YP_891216.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-130	Identity = 61.77%
	4	gi 57505253 ref ZP_00371182.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-129	Identity = 61.67%
	5	gi 57241729 ref ZP_00369674.1	Campylobacter lari RM2100	E-value = 3.00E-128	Identity = 62.41%
AB0636	1	<i>rpiB</i> gi 78777314 ref YP_393629.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-48	Identity = 61.54%
	2	gi 149194498 ref ZP_01871594.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-45	Identity = 62.41%
	3	gi 34557704 ref NP_907519.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-44	Identity = 58.57%
	4	gi 152992257 ref YP_001357978.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-43	Identity = 57.14%
	5	gi 152990457 ref YP_001356179.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-43	Identity = 59.15%
AB0637	1	<i>lepP</i> gi 154175097 ref YP_001407943.1	Campylobacter curvus 525.92	E-value = 3.00E-86	Identity = 58.58%
	2	gi 152990459 ref YP_001356181.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-83	Identity = 57.04%
	3	gi 57242455 ref ZP_00370393.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-79	Identity = 56.59%
	4	gi 34557702 ref NP_907517.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-79	Identity = 54.92%
	5	gi 57241057 ref ZP_00369004.1	Campylobacter lari RM2100	E-value = 3.00E-77	Identity = 56.09%

AB0638	1	<i>foiD</i>	gi 152992260 ref YP_001357981.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-96	Identity = 65.36%
	2		gi 78777311 ref YP_393626.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-95	Identity = 62.41%
	3		gi 149193973 ref ZP_01871071.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-94	Identity = 65.11%
	4		gi 34557701 ref NP_907516.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-94	Identity = 62.41%
	5		gi 152990460 ref YP_001356182.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-92	Identity = 63.48%
AB0639	1	<i>rplY</i>	gi 149194451 ref ZP_01871548.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-60	Identity = 65.17%
	2		gi 152990133 ref YP_001355855.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-50	Identity = 62.28%
	3		gi 57241439 ref ZP_00369385.1	Campylobacter lari RM2100	E-value = 2.00E-49	Identity = 62.36%
	4		gi 154174063 ref YP_001408881.1	Campylobacter curvus 525.92	E-value = 3.00E-48	Identity = 60.67%
	5		gi 57168447 ref ZP_00367581.1	Campylobacter coli RM2228	E-value = 4.00E-48	Identity = 60.67%
AB0640	1	<i>pth</i>	gi 152990134 ref YP_001355856.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-49	Identity = 50.27%
	2		gi 118474844 ref YP_891539.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-42	Identity = 52.17%
	3		gi 78776667 ref YP_392982.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-42	Identity = 55.80%
	4		gi 154173637 ref YP_001408880.1	Campylobacter curvus 525.92	E-value = 7.00E-41	Identity = 52.46%
	5		gi 82523965 emb CAI78776.1	uncultured epsilon proteobacterium	E-value = 1.00E-39	Identity = 51.93%
AB0641	1		gi 34558361 ref NP_908176.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-60	Identity = 35.33%
	2		gi 82523966 emb CAI78777.1	uncultured epsilon proteobacterium	E-value = 2.00E-54	Identity = 36.42%
	3		gi 118474677 ref YP_891476.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-51	Identity = 33.62%
	4		gi 78776668 ref YP_392983.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-51	Identity = 34.50%
	5		gi 157165310 ref YP_001466458.1	Campylobacter concisus 13826	E-value = 8.00E-48	Identity = 30.95%
AB0642	1		<b>*** No matches found ***</b>			
AB0643	1	<i>amiA</i>	gi 34556684 ref NP_906499.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-78	Identity = 46.30%
	2		gi 78776921 ref YP_393236.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-78	Identity = 39.08%
	3		gi 154174999 ref YP_001407882.1	Campylobacter curvus 525.92	E-value = 2.00E-71	Identity = 40.86%
	4		gi 157165276 ref YP_001467337.1	Campylobacter concisus 13826	E-value = 3.00E-67	Identity = 39.96%
	5		gi 118474687 ref YP_892367.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-67	Identity = 40.35%
AB0644	1	<i>npd</i>	gi 152990509 ref YP_001356231.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-147	Identity = 73.26%
	2		gi 78776920 ref YP_393235.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-140	Identity = 69.77%
	3		gi 34556683 ref NP_906498.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-138	Identity = 65.60%
	4		gi 15611777 ref NP_223428.1	Helicobacter pylori J99	E-value = 2.00E-137	Identity = 69.39%
	5		gi 149194047 ref ZP_01871145.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-136	Identity = 70.85%
AB0645	1	<i>tyrS</i>	gi 78776919 ref YP_393234.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-150	Identity = 68.61%
	2		gi 152990508 ref YP_001356230.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-146	Identity = 67.85%
	3		gi 34556682 ref NP_906497.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-145	Identity = 64.66%
	4		gi 118474811 ref YP_892369.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-143	Identity = 64.09%
	5		gi 157164866 ref YP_001467339.1	Campylobacter concisus 13826	E-value = 3.00E-143	Identity = 65.40%
AB0646	1	<i>spoT</i>	gi 34556681 ref NP_906496.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 51.26%
	2		gi 152990507 ref YP_001356229.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 49.79%
	3		gi 152993328 ref YP_001359049.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 50.48%
	4		gi 32266330 ref NP_860362.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 47.07%
	5		gi 154174887 ref YP_001407885.1	Campylobacter curvus 525.92	E-value = 0	Identity = 46.9%
AB0647	1	<i>rpoZ</i>	gi 152990506 ref YP_001356228.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-08	Identity = 56.92%
	2		gi 57505446 ref ZP_00371374.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-07	Identity = 45.71%
	3		gi 118475016 ref YP_892371.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-07	Identity = 50.00%
	4		gi 154148131 ref YP_001406833.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-07	Identity = 47.06%
	5		gi 34556680 ref NP_906495.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-07	Identity = 55.74%
AB0648	1	<i>pyrH</i>	gi 152993330 ref YP_001359051.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-88	Identity = 74.89%
	2		gi 57505445 ref ZP_00371373.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-81	Identity = 70.82%
	3		gi 152990505 ref YP_001356227.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-81	Identity = 71.06%



	4	gi 34556679 ref NP_906494.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-81	Identity = 74.46%
	5	gi 78776916 ref YP_393231.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-81	Identity = 75.32%
AB0649	1	gi 34558028 ref NP_907843.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-49	Identity = 32.87%
	2	gi 157164688 ref YP_001467722.1	Campylobacter concisus 13826	E-value = 3.00E-40	Identity = 33.33%
	3	gi 152989970 ref YP_001355692.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-39	Identity = 33.71%
	4	gi 149194773 ref ZP_01871868.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-34	Identity = 34.42%
	5	gi 154148312 ref YP_001406027.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-34	Identity = 34.24%
AB0650	1	gi 78777093 ref YP_393408.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-104	Identity = 62.33%
	2	gi 149194479 ref ZP_01871575.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-102	Identity = 67.23%
	3	gi 152990831 ref YP_001356553.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-100	Identity = 61.13%
	4	gi 118475415 ref YP_891856.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-97	Identity = 61.06%
	5	gi 152993274 ref YP_001358995.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-95	Identity = 57.14%
AB0651	1	gi 152993273 ref YP_001358994.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-87	Identity = 65.89%
	2	gi 152990830 ref YP_001356552.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-85	Identity = 66.67%
	3	gi 34556557 ref NP_906372.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-77	Identity = 58.91%
	4	gi 78777094 ref YP_393409.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-77	Identity = 62.65%
	5	gi 154147967 ref YP_001407226.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-73	Identity = 59.07%
AB0652	1	gi 152990924 ref YP_001356646.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-164	Identity = 63.75%
	2	gi 152992067 ref YP_001357788.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-156	Identity = 59.14%
	3	gi 78777475 ref YP_393790.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-152	Identity = 58.89%
	4	gi 149193726 ref ZP_01870824.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-150	Identity = 60.73%
	5	gi 34556541 ref NP_906356.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-138	Identity = 54.85%
AB0653	1		<b>*** No matches found ***</b>		
AB0654	1	gi 78778141 ref YP_394456.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 84.29%
	2	gi 78777472 ref YP_393787.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 83.01%
	3	gi 152992073 ref YP_001357794.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 83.82%
	4	gi 149193729 ref ZP_01870827.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 77.24%
	5	gi 118475761 ref YP_892299.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 75.49%
AB0655	1	gi 78777471 ref YP_393786.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 78.77%
	2	gi 152990921 ref YP_001356643.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 66.73%
	3	gi 152992078 ref YP_001357799.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 63.91%
	4	gi 34556537 ref NP_906352.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 64.62%
	5	gi 149193730 ref ZP_01870828.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-177	Identity = 62.50%
AB0656	1	gi 152990920 ref YP_001356642.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-28	Identity = 39.42%
	2	gi 153951399 ref YP_001398559.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-27	Identity = 39.78%
	3	gi 86151287 ref ZP_01069502.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-27	Identity = 40.32%
	4	gi 157414694 ref YP_001481950.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 1.00E-27	Identity = 40.32%
	5	gi 86153823 ref ZP_01072026.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-27	Identity = 40.32%
AB0657	1	gi 78776577 ref YP_392892.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-151	Identity = 77.21%
	2	gi 152993710 ref YP_001359431.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-148	Identity = 76.59%
	3	gi 152990086 ref YP_001355808.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-144	Identity = 75.21%
	4	gi 149193897 ref ZP_01870995.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-132	Identity = 69.36%
	5	gi 57506053 ref ZP_00371976.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-128	Identity = 63.82%
AB0658	1	gi 78778156 ref YP_394471.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-78	Identity = 42.46%
AB0659	1	gi 78776576 ref YP_392891.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-135	Identity = 56.56%
	2	gi 34556788 ref NP_906603.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-128	Identity = 56.72%
	3	gi 152990087 ref YP_001355809.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-125	Identity = 54.28%
	4	gi 149193895 ref ZP_01870993.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-115	Identity = 50.42%
	5	gi 118474379 ref YP_892150.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-103	Identity = 48.11%

AB0660	1	<i>ugd</i>	gi 78778162 ref YP_394477.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-176	Identity = 81.96%
	2		gi 152994834 ref YP_001339669.1	Marinomonas sp. MWYL1	E-value = 5.00E-171	Identity = 78.81%
	3		gi 88795903 ref ZP_01111592.1	Alteromonas macleodii 'Deep ecotype'	E-value = 1.00E-168	Identity = 78.55%
	4		gi 116220093 ref ZP_01485541.1	Vibrio cholerae V51	E-value = 4.00E-167	Identity = 75.00%
	5		gi 116190104 ref ZP_01479846.1	Vibrio cholerae MO10	E-value = 8.00E-167	Identity = 74.74%
AB0661	1		gi 34556483 ref NP_906298.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-152	Identity = 74.50%
	2		gi 21673069 ref NP_661134.1	Chlorobium tepidum TLS	E-value = 3.00E-141	Identity = 68.84%
	3		gi 56459673 ref YP_154954.1	Idiomarina loihiensis L2TR	E-value = 1.00E-140	Identity = 67.23%
	4		gi 152991158 ref YP_001356880.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-137	Identity = 66.67%
	5		gi 157164041 ref YP_001467309.1	Campylobacter concisus 13826	E-value = 9.00E-135	Identity = 67.51%
AB0662	1		gi 157165142 ref YP_001467302.1	Campylobacter concisus 13826	E-value = 6.00E-178	Identity = 74.51%
	2		gi 149195132 ref ZP_01872223.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-174	Identity = 74.41%
	3		gi 154175455 ref YP_001407699.1	Campylobacter curvus 525.92	E-value = 2.00E-174	Identity = 72.33%
	4		gi 113475907 ref YP_721968.1	Trichodesmium erythraeum IMS101	E-value = 5.00E-168	Identity = 69.64%
	5		gi 34556508 ref NP_906323.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-166	Identity = 70.78%
AB0663	1		gi 157165229 ref YP_001467378.1	Campylobacter concisus 13826	E-value = 2.00E-162	Identity = 84.81%
	2		gi 78777619 ref YP_393934.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-151	Identity = 79.13%
	3		gi 152991689 ref YP_001357410.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-146	Identity = 77.67%
	4		gi 34558464 ref NP_908279.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-131	Identity = 69.94%
	5		gi 124004200 ref ZP_01689046.1	Microscilla marina ATCC 23134	E-value = 2.00E-117	Identity = 65.40%
AB0664	1		gi 78777618 ref YP_393933.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-87	Identity = 81.77%
	2		gi 157164668 ref YP_001467377.1	Campylobacter concisus 13826	E-value = 1.00E-82	Identity = 79.37%
	3		gi 34558463 ref NP_908278.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-73	Identity = 71.51%
	4		gi 152991690 ref YP_001357411.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-72	Identity = 72.73%
	5		gi 32267160 ref NP_861192.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-61	Identity = 60.11%
AB0665	1		gi 157164115 ref YP_001467376.1	Campylobacter concisus 13826	E-value = 3.00E-160	Identity = 75.14%
	2		gi 152991691 ref YP_001357412.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-156	Identity = 74.31%
	3		gi 34558462 ref NP_908277.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-142	Identity = 70.11%
	4		gi 152991058 ref YP_001356780.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-125	Identity = 60.77%
	5		gi 154175323 ref YP_001407552.1	Campylobacter curvus 525.92	E-value = 3.00E-115	Identity = 57.82%
AB0666	1		gi 118745620 ref ZP_01593590.1	Geobacter lovleyi SZ	E-value = 2.00E-117	Identity = 53.69%
	2		gi 124515336 gb EAY56846.1	Leptospirillum sp. Group II UBA	E-value = 3.00E-103	Identity = 46.58%
	3		gi 91201285 emb CAJ74345.1	Candidatus Kuenenia stuttgartiensis	E-value = 9.00E-100	Identity = 50.00%
	4		gi 117926941 ref YP_867558.1	Magnetococcus sp. MC-1	E-value = 6.00E-88	Identity = 42.96%
	5		gi 154707773 ref YP_001423503.1	Coxiella burnetii Dugway 7E9-12	E-value = 3.00E-79	Identity = 42.49%
AB0667	1		gi 157164630 ref YP_001467375.1	Campylobacter concisus 13826	E-value = 2.00E-171	Identity = 87.42%
	2		gi 124004199 ref ZP_01689045.1	Microscilla marina ATCC 23134	E-value = 5.00E-138	Identity = 71.34%
	3		gi 33594840 ref NP_882483.1	Bordetella parapertussis 12822	E-value = 8.00E-137	Identity = 69.16%
	4		gi 114566251 ref YP_753405.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 8.00E-98	Identity = 55.94%
	5		gi 153208020 ref ZP_01946554.1	Coxiella burnetii 'MSU Goat Q177'	E-value = 1.00E-95	Identity = 53.16%
AB0668	1		gi 157163982 ref YP_001467373.1	Campylobacter concisus 13826	E-value = 5.00E-179	Identity = 75.68%
	2		gi 78776391 ref YP_392706.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-151	Identity = 65.90%
	3		gi 114566252 ref YP_753406.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 2.00E-99	Identity = 47.45%
	4		gi 124004198 ref ZP_01689044.1	Microscilla marina ATCC 23134	E-value = 3.00E-92	Identity = 45.32%
	5		gi 154706674 ref YP_001424278.1	Coxiella burnetii Dugway 7E9-12	E-value = 1.00E-81	Identity = 42.09%
AB0669	1	<i>asnB2</i>	gi 157165663 ref YP_001467372.1	Campylobacter concisus 13826	E-value = 0	Identity = 74.17%
	2		gi 78776401 ref YP_392716.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 68.5%
	3		gi 33594842 ref NP_882485.1	Bordetella parapertussis 12822	E-value = 0	Identity = 55.46%
	4		gi 104304766 gb ABF72471.1	Bordetella parapertussis	E-value = 0	Identity = 55.46%

	5	gi 114566253 ref YP_753407.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 0	Identity = 57.55%
AB0670	1	gi 153208027 ref ZP_01946561.1	Coxiella burnetii 'MSU Goat Q177'	E-value = 4.00E-42	Identity = 52.63%
	2	gi 154707691 ref YP_001424280.1	Coxiella burnetii Dugway 7E9-12	E-value = 1.00E-41	Identity = 51.46%
	3	gi 29654160 ref NP_819852.1	Coxiella burnetii RSA 493	E-value = 2.00E-41	Identity = 52.05%
	4	gi 93005449 ref YP_579886.1	Psychrobacter cryohalolentis K5	E-value = 2.00E-39	Identity = 59.59%
	5	gi 144899767 emb CAM76631.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 5.00E-32	Identity = 40.83%
AB0671	1	gi 124004195 ref ZP_01689041.1	Microscilla marina ATCC 23134	E-value = 8.00E-137	Identity = 64.42%
	2	gi 152982955 ref YP_001353959.1	Janthinobacterium sp. Marseille	E-value = 1.00E-107	Identity = 51.74%
	3	gi 147919832 ref YP_686419.1	uncultured methanogenic archaeon RC-I	E-value = 3.00E-86	Identity = 41.62%
	4	gi 45358644 ref NP_988201.1	Methanococcus maripaludis S2	E-value = 2.00E-65	Identity = 40.33%
	5	gi 88810769 ref ZP_01126026.1	Nitrococcus mobilis Nb-231	E-value = 3.00E-63	Identity = 39.18%
AB0672	1	gi 124004194 ref ZP_01689040.1	Microscilla marina ATCC 23134	E-value = 3.00E-66	Identity = 60.49%
	2	gi 147919831 ref YP_686420.1	uncultured methanogenic archaeon RC-I	E-value = 3.00E-56	Identity = 50.49%
	3	gi 45358645 ref NP_988202.1	Methanococcus maripaludis S2	E-value = 1.00E-54	Identity = 53.43%
	4	gi 88810767 ref ZP_01126024.1	Nitrococcus mobilis Nb-231	E-value = 5.00E-50	Identity = 48.02%
	5	gi 37678539 ref NP_933148.1	Vibrio vulnificus YJ016	E-value = 6.00E-50	Identity = 44.23%
AB0673	1	gi 124004193 ref ZP_01689039.1	Microscilla marina ATCC 23134	E-value = 4.00E-88	Identity = 61.75%
	2	gi 124483504 emb CAM32625.1	Herbaspirillum seropedicae	E-value = 1.00E-85	Identity = 56.92%
	3	gi 20559897 gb AAM27665.1 AF498408_13	Pseudomonas aeruginosa	E-value = 3.00E-68	Identity = 50.00%
	4	gi 15598347 ref NP_251841.1	Pseudomonas aeruginosa PAO1	E-value = 3.00E-68	Identity = 50.40%
	5	gi 49082270 gb AAT50535.1	synthetic construct	E-value = 3.00E-68	Identity = 50.40%
AB0674	1	gi 114566261 ref YP_753415.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 6.00E-11	Identity = 26.07%
AB0675	1		<b>*** No matches found ***</b>		
AB0676	1	gi 34556507 ref NP_906322.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-158	Identity = 55.22%
	2	gi 153951013 ref YP_001397760.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-137	Identity = 48.58%
	3	gi 57241552 ref ZP_00369498.1	Campylobacter lari RM2100	E-value = 1.00E-137	Identity = 49.46%
	4	gi 86152730 ref ZP_01070935.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 3.00E-135	Identity = 48.22%
	5	gi 15792455 ref NP_282278.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-135	Identity = 48.22%
AB0677	1	gi 78189231 ref YP_379569.1	Chlorobium chlorochromatii CaD3	E-value = 1.00E-73	Identity = 32.66%
	2	gi 126462117 ref YP_001043231.1	Rhodobacter sphaeroides ATCC 17029	E-value = 8.00E-68	Identity = 29.33%
	3	gi 109897409 ref YP_660664.1	Pseudoalteromonas atlantica T6c	E-value = 6.00E-67	Identity = 30.31%
	4	gi 77463243 ref YP_352747.1	Rhodobacter sphaeroides 2.4.1	E-value = 3.00E-66	Identity = 29.25%
	5	gi 116620311 ref YP_822467.1	Solibacter usitatus Ellin6076	E-value = 4.00E-66	Identity = 28.76%
AB0678	1	gi 88712954 ref ZP_01107039.1	Flavobacteriales bacterium HTCC2170	E-value = 4.00E-64	Identity = 40.05%
	2	gi 34556500 ref NP_906315.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-63	Identity = 41.84%
	3	gi 154173620 ref YP_001407706.1	Campylobacter curvus 525.92	E-value = 2.00E-59	Identity = 37.76%
	4	gi 154148421 ref YP_001406516.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-58	Identity = 39.68%
	5	gi 57168011 ref ZP_00367150.1	Campylobacter coli RM2228	E-value = 1.00E-56	Identity = 41.05%
AB0679	1	gi 149195369 ref ZP_01872455.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 60.19%
	2	gi 125621795 gb EAZ50122.1	Vibrio cholerae V51	E-value = 3.00E-155	Identity = 45.54%
	3	gi 116220099 ref ZP_01485547.1	Vibrio cholerae V51	E-value = 4.00E-150	Identity = 45.63%
	4	gi 23128937 ref ZP_00110773.1	Nostoc punctiforme PCC 73102	E-value = 5.00E-142	Identity = 40.71%
	5	gi 71065231 ref YP_263958.1	Psychrobacter arcticus 273-4	E-value = 5.00E-140	Identity = 45.10%
AB0680	1	gi 30250198 ref NP_842268.1	Nitrosomonas europaea ATCC 19718	E-value = 5.00E-102	Identity = 48.37%
	2	gi 114332077 ref YP_748299.1	Nitrosomonas eutropha C91	E-value = 6.00E-102	Identity = 49.86%
	3	gi 149195368 ref ZP_01872454.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-100	Identity = 54.62%
	4	gi 124005067 ref ZP_01689909.1	Microscilla marina ATCC 23134	E-value = 3.00E-95	Identity = 47.41%
	5	gi 152993103 ref YP_001358824.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-95	Identity = 45.11%
AB0681	1	gi 153201654 ref ZP_01943463.1	Listeria monocytogenes HPB2262	E-value = 5.00E-22	Identity = 32.14%

	2	gi 76798981 ref ZP_00781181.1	Streptococcus agalactiae 18RS21	E-value = 8.00E-21	Identity = 31.60%
	3	gi 121534916 ref ZP_01666735.1	Thermosinus carboxydivorans Nor1	E-value = 5.00E-20	Identity = 31.13%
	4	gi 127512347 ref YP_001093544.1	Shewanella loihica PV-4	E-value = 2.00E-19	Identity = 30.57%
	5	gi 153956291 ref YP_001397056.1	Clostridium kluyveri DSM 555	E-value = 3.00E-19	Identity = 35.47%
AB0682	1		<b>*** No matches found ***</b>		
AB0683	1	gi 118744670 ref ZP_01592660.1	Geobacter lovleyi SZ	E-value = 4.00E-90	Identity = 46.14%
	2	gi 78777617 ref YP_393932.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-60	Identity = 39.10%
	3	gi 152991692 ref YP_001357413.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-59	Identity = 38.73%
	4	gi 121606015 ref YP_983344.1	Polaromonas naphthalenivorans CJ2	E-value = 1.00E-52	Identity = 32.20%
	5	gi 73668674 ref YP_304689.1	Methanosarcina barkeri str. Fusaro	E-value = 5.00E-52	Identity = 34.47%
AB0684	1	wbpG2 gi 1545856 gb AAC45861.1	Pseudomonas aeruginosa	E-value = 3.00E-95	Identity = 46.03%
	2	gi 15598346 ref NP_251840.1	Pseudomonas aeruginosa PAO1	E-value = 3.00E-95	Identity = 46.03%
	3	gi 121606012 ref YP_983341.1	Polaromonas naphthalenivorans CJ2	E-value = 4.00E-95	Identity = 49.13%
	4	gi 117926371 ref YP_866988.1	Magnetococcus sp. MC-1	E-value = 2.00E-92	Identity = 46.34%
	5	gi 20559898 gb AAM27666.1 AF498408_14	Pseudomonas aeruginosa	E-value = 3.00E-92	Identity = 46.11%
AB0685	1	gi 109897502 ref YP_660757.1	Pseudoalteromonas atlantica T6c	E-value = 3.00E-32	Identity = 41.76%
	2	gi 126667443 ref ZP_01738414.1	Marinobacter sp. ELB17	E-value = 3.00E-29	Identity = 42.68%
	3	gi 88704010 ref ZP_01101725.1	gamma proteobacterium KT 71	E-value = 1.00E-28	Identity = 37.58%
	4	gi 118580867 ref YP_902117.1	Pelobacter propionicus DSM 2379	E-value = 3.00E-25	Identity = 36.52%
	5	gi 113367016 gb ABI34563.1	Escherichia coli	E-value = 1.00E-24	Identity = 34.66%
AB0686	1	gi 88802433 ref ZP_01117960.1	Polaribacter irgensii 23-P	E-value = 4.00E-09	Identity = 25.41%
AB0687	1		<b>*** No matches found ***</b>		
AB0688	1	gi 148652056 ref YP_001279149.1	Psychrobacter sp. PRwf-1	E-value = 3.00E-56	Identity = 38.60%
	2	gi 52425551 ref YP_088688.1	Mannheimia succiniciproducens MBEL55E	E-value = 2.00E-52	Identity = 32.73%
	3	gi 117926370 ref YP_866987.1	Magnetococcus sp. MC-1	E-value = 4.00E-52	Identity = 30.95%
	4	gi 152977792 ref YP_001343421.1	Actinobacillus succinogenes 130Z	E-value = 3.00E-51	Identity = 31.79%
	5	gi 150015874 ref YP_001308128.1	Clostridium beijerinckii NCIMB 8052	E-value = 7.00E-48	Identity = 37.11%
AB0689	1	wbpG3 gi 121606012 ref YP_983341.1	Polaromonas naphthalenivorans CJ2	E-value = 6.00E-144	Identity = 60.42%
	2	gi 1545856 gb AAC45861.1	Pseudomonas aeruginosa	E-value = 1.00E-138	Identity = 61.07%
	3	gi 15598346 ref NP_251840.1	Pseudomonas aeruginosa PAO1	E-value = 1.00E-138	Identity = 61.07%
	4	gi 20559898 gb AAM27666.1 AF498408_14	Pseudomonas aeruginosa	E-value = 4.00E-134	Identity = 60.87%
	5	gi 85714648 ref ZP_01045635.1	Nitrobacter sp. Nb-311A	E-value = 8.00E-97	Identity = 45.20%
AB0690	1	hisH3 gi 147919831 ref YP_686420.1	uncultured methanogenic archaeon RC-1	E-value = 8.00E-60	Identity = 53.27%
	2	gi 124004194 ref ZP_01689040.1	Microscilla marina ATCC 23134	E-value = 4.00E-58	Identity = 55.28%
	3	gi 45358645 ref NP_988202.1	Methanococcus maripaludis S2	E-value = 5.00E-58	Identity = 59.30%
	4	gi 15598348 ref NP_251842.1	Pseudomonas aeruginosa PAO1	E-value = 3.00E-55	Identity = 46.53%
	5	gi 49079444 gb AAT49893.1	synthetic construct	E-value = 3.00E-55	Identity = 46.53%
AB0691	1	hisF3 gi 20559897 gb AAM27665.1 AF498408_13	Pseudomonas aeruginosa	E-value = 8.00E-76	Identity = 52.42%
	2	gi 15598347 ref NP_251841.1	Pseudomonas aeruginosa PAO1	E-value = 9.00E-76	Identity = 52.82%
	3	gi 49082270 gb AAT50535.1	synthetic construct	E-value = 9.00E-76	Identity = 52.82%
	4	gi 42523189 ref NP_968569.1	Bdellovibrio bacteriovorus HD100	E-value = 5.00E-73	Identity = 54.12%
	5	gi 85714650 ref ZP_01045637.1	Nitrobacter sp. Nb-311A	E-value = 5.00E-73	Identity = 55.51%
AB0692	1	gi 121606010 ref YP_983339.1	Polaromonas naphthalenivorans CJ2	E-value = 2.00E-129	Identity = 58.70%
	2	gi 116693989 ref YP_728200.1	Ralstonia eutropha H16	E-value = 6.00E-127	Identity = 56.01%
	3	gi 20559975 gb AAM27733.1 AF498412_15	Pseudomonas aeruginosa	E-value = 2.00E-126	Identity = 56.40%
	4	gi 20559899 gb AAM27667.1 AF498408_15	Pseudomonas aeruginosa	E-value = 3.00E-126	Identity = 56.13%
	5	gi 20559932 gb AAM27698.1 AF498410_15	Pseudomonas aeruginosa	E-value = 7.00E-126	Identity = 56.13%
AB0693	1	gi 78777615 ref YP_393930.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-169	Identity = 82.87%
	2	gi 157164094 ref YP_001467359.1	Campylobacter concisus 13826	E-value = 5.00E-162	Identity = 78.47%

	3	gi 152994867 ref YP_001339702.1	Marinomonas sp. MWYL1	E-value = 2.00E-143	Identity = 70.19%
	4	gi 156858319 gb EDO51750.1	Bacteroides uniformis ATCC 8492	E-value = 1.00E-131	Identity = 63.74%
	5	gi 15598344 ref NP_251838.1	Pseudomonas aeruginosa PAO1	E-value = 1.00E-120	Identity = 60.34%
AB0694	1	gi 152990994 ref YP_001356716.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-90	Identity = 54.98%
	2	gi 152991698 ref YP_001357419.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-62	Identity = 42.30%
	3	gi 37528619 ref NP_931964.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 1.00E-61	Identity = 42.94%
	4	gi 157364739 ref YP_001471506.1	Thermotoga lettingae TMO	E-value = 2.00E-58	Identity = 39.04%
	5	gi 154248927 ref YP_001409752.1	Fervidobacterium nodosum Rt17-B1	E-value = 3.00E-51	Identity = 37.35%
AB0695	1	gi 114566271 ref YP_753425.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 7.00E-47	Identity = 45.00%
	2	gi 148549143 ref YP_001269245.1	Pseudomonas putida F1	E-value = 1.00E-43	Identity = 36.54%
	3	gi 28868961 ref NP_791580.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 1.00E-41	Identity = 38.83%
	4	gi 116051138 ref YP_790031.1	Pseudomonas aeruginosa UCBPP-PA14	E-value = 4.00E-40	Identity = 36.79%
	5	gi 59803193 gb AAAX07740.1	Escherichia coli	E-value = 5.00E-40	Identity = 35.60%
AB0696	1	gi 151572529 gb EDN38183.1	Francisella tularensis subsp. novicida GA99-3548	E-value = 8.00E-44	Identity = 44.21%
	2	gi 86144024 ref ZP_01062362.1	Flavobacterium sp. MED217	E-value = 9.00E-40	Identity = 49.40%
	3	gi 88802242 ref ZP_01117769.1	Polaribacter irgensii 23-P	E-value = 9.00E-40	Identity = 47.57%
	4	gi 29346238 ref NP_809741.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 1.00E-39	Identity = 50.00%
	5	gi 150004940 ref YP_001299684.1	Bacteroides vulgatus ATCC 8482	E-value = 2.00E-39	Identity = 45.79%
AB0697	1	gi 151572542 gb EDN38196.1	Francisella tularensis subsp. novicida GA99-3548	E-value = 1.00E-166	Identity = 53.04%
	2	gi 151571086 gb EDN36740.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 3.00E-162	Identity = 53.04%
	3	gi 89255990 ref YP_513352.1	Francisella tularensis subsp. holarctica	E-value = 9.00E-161	Identity = 52.70%
	4	gi 56708505 ref YP_170401.1	Francisella tularensis subsp. tularensis SCHU S4	E-value = 9.00E-161	Identity = 52.70%
	5	gi 156501993 ref YP_001428058.1	Francisella tularensis subsp. holarctica FTA	E-value = 2.00E-159	Identity = 52.82%
AB0698	1	gi 152993712 ref YP_001359433.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-06	Identity = 32.06%
AB0699	1	gi 78776783 ref YP_393098.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-64	Identity = 50.18%
	2	gi 52424994 ref YP_088131.1	Mannheimia succiniciproducens MBEL55E	E-value = 1.00E-55	Identity = 43.21%
	3	gi 113461467 ref YP_719536.1	Haemophilus somnus 129PT	E-value = 4.00E-55	Identity = 43.66%
	4	gi 53728451 ref ZP_00132618.2	Haemophilus somnus 2336	E-value = 6.00E-55	Identity = 45.68%
	5	gi 154148219 ref YP_001406356.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-54	Identity = 46.86%
AB0700	1	gi 34557706 ref NP_907521.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-59	Identity = 60.77%
	2	gi 78777316 ref YP_393631.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-55	Identity = 58.10%
	3	gi 57241150 ref ZP_00369097.1	Campylobacter lari RM2100	E-value = 4.00E-55	Identity = 60.00%
	4	gi 118474996 ref YP_892327.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-54	Identity = 59.22%
	5	gi 157165725 ref YP_001466475.1	Campylobacter concisus 13826	E-value = 3.00E-54	Identity = 55.00%
AB0701	1	gi 78777317 ref YP_393632.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 78.95%
	2	gi 34557707 ref NP_907522.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 73.88%
	3	gi 152990455 ref YP_001356177.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 75.19%
	4	gi 152992248 ref YP_001357969.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-175	Identity = 74.31%
	5	gi 149193711 ref ZP_01870809.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-173	Identity = 75.31%
AB0702	1	gi 152990454 ref YP_001356176.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-69	Identity = 59.82%
	2	gi 32266870 ref NP_860902.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-62	Identity = 62.18%
	3	gi 157164178 ref YP_001466474.1	Campylobacter concisus 13826	E-value = 4.00E-58	Identity = 57.22%
	4	gi 34557708 ref NP_907523.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-54	Identity = 56.45%
	5	gi 118474234 ref YP_892326.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-54	Identity = 54.77%
AB0703	1	gi 149193709 ref ZP_01870807.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-130	Identity = 56.28%
	2	gi 34557709 ref NP_907524.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-126	Identity = 51.06%
	3	gi 152990453 ref YP_001356175.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-125	Identity = 56.56%
	4	gi 157164548 ref YP_001466473.1	Campylobacter concisus 13826	E-value = 2.00E-124	Identity = 54.91%
	5	gi 78777318 ref YP_393633.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-123	Identity = 52.95%

AB0705	1	gi 78777741 ref YP_394056.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-06	Identity = 31.18%
	2	gi 126668448 ref ZP_01739404.1	Marinobacter sp. ELB17	E-value = 2.00E-06	Identity = 26.37%
AB0706	1	gi 78776478 ref YP_392793.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-20	Identity = 42.40%
	2	gi 109946886 ref YP_664114.1	Helicobacter acinonychis str. Sheeba	E-value = 4.00E-20	Identity = 44.35%
	3	gi 15645953 ref NP_208132.1	Helicobacter pylori 26695	E-value = 5.00E-20	Identity = 44.35%
	4	gi 15612324 ref NP_223977.1	Helicobacter pylori J99	E-value = 5.00E-20	Identity = 44.35%
	5	gi 108563712 ref YP_628028.1	Helicobacter pylori HPAG1	E-value = 6.00E-20	Identity = 44.35%
AB0707	1	gi 78776479 ref YP_392794.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-31	Identity = 57.86%
	2	gi 46156301 ref ZP_00133119.2	Haemophilus somnus 2336	E-value = 1.00E-28	Identity = 56.30%
	3	gi 118744579 ref ZP_01592570.1	Geobacter lovleyi SZ	E-value = 8.00E-28	Identity = 55.47%
	4	gi 52424570 ref YP_087707.1	Mannheimia succiniciproducens MBEL55E	E-value = 6.00E-27	Identity = 54.81%
	5	gi 152979664 ref YP_001345293.1	Actinobacillus succinogenes 130Z	E-value = 9.00E-27	Identity = 54.74%
AB0708	1	gi 78778234 ref YP_394549.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-38	Identity = 31.35%
	2	gi 152990809 ref YP_001356531.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-25	Identity = 27.32%
	3	gi 34556739 ref NP_906554.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-25	Identity = 25.96%
	4	gi 78777451 ref YP_393766.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-23	Identity = 27.70%
	5	gi 149193919 ref ZP_01871017.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-15	Identity = 25.16%
AB0709	1	gi 110600581 ref ZP_01388798.1	Geobacter sp. FRC-32	E-value = 2.00E-70	Identity = 41.08%
	2	gi 78778235 ref YP_394550.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-69	Identity = 42.35%
	3	gi 15889118 ref NP_354799.1	Agrobacterium tumefaciens str. C58	E-value = 2.00E-68	Identity = 38.90%
	4	gi 17935705 ref NP_532495.1	Agrobacterium tumefaciens str. C58	E-value = 2.00E-68	Identity = 38.90%
	5	gi 116748526 ref YP_845213.1	Syntrophobacter fumaroxidans MPOB	E-value = 6.00E-66	Identity = 37.66%
AB0710	1	gi 78778236 ref YP_394551.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-81	Identity = 64.19%
	2	gi 89901955 ref YP_524426.1	Rhodospirillum rubrum T118	E-value = 5.00E-79	Identity = 66.96%
	3	gi 114562988 ref YP_750501.1	Shewanella frigidimarina NCIMB 400	E-value = 1.00E-76	Identity = 62.13%
	4	gi 71909528 ref YP_287115.1	Dechloromonas aromatica RCB	E-value = 2.00E-76	Identity = 69.55%
	5	gi 148555065 ref YP_001262647.1	Sphingomonas wittichii RW1	E-value = 3.00E-76	Identity = 66.22%
AB0711	1	gi 78778237 ref YP_394552.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-126	Identity = 57.82%
	2	gi 114562987 ref YP_750500.1	Shewanella frigidimarina NCIMB 400	E-value = 3.00E-109	Identity = 52.11%
	3	gi 15889120 ref NP_354801.1	Agrobacterium tumefaciens str. C58	E-value = 8.00E-109	Identity = 53.40%
	4	gi 17935707 ref NP_532497.1	Agrobacterium tumefaciens str. C58	E-value = 7.00E-108	Identity = 53.40%
	5	gi 85860349 ref YP_462551.1	Syntrophus aciditrophicus SB	E-value = 9.00E-106	Identity = 51.36%
AB0712	1	gi 72090049 ref XP_788280.1	Strongylocentrotus purpuratus	E-value = 2.00E-06	Identity = 28.00%
AB0714	1	gi 34557896 ref NP_907711.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 57.22%
	2	gi 157165391 ref YP_001466946.1	Campylobacter concisus 13826	E-value = 0	Identity = 61.88%
	3	gi 154175545 ref YP_001408094.1	Campylobacter curvus 525.92	E-value = 0	Identity = 59.71%
	4	gi 118475026 ref YP_892006.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 59.46%
	5	gi 154149333 ref YP_001405955.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 53.24%
AB0715	1	gi 34557897 ref NP_907712.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-16	Identity = 51.58%
	2	gi 154174983 ref YP_001408095.1	Campylobacter curvus 525.92	E-value = 1.00E-11	Identity = 47.92%
	3	gi 118474798 ref YP_892007.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-09	Identity = 47.87%
AB0716	1	gi 34557898 ref NP_907713.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-16	Identity = 54.95%
AB0717	1		<b>*** No matches found ***</b>		
AB0718	1	gi 67159171 ref ZP_00419877.1	Azotobacter vinelandii AvOP	E-value = 7.00E-22	Identity = 30.09%
AB0719	1	gi 157165427 ref YP_001466941.1	Campylobacter concisus 13826	E-value = 3.00E-22	Identity = 50.98%
	2	gi 154174615 ref YP_001408099.1	Campylobacter curvus 525.92	E-value = 4.00E-20	Identity = 50.00%
	3	gi 34557901 ref NP_907716.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-18	Identity = 42.72%
	4	gi 118475457 ref YP_892011.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-13	Identity = 40.86%
	5	gi 154149520 ref YP_001405959.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-11	Identity = 35.87%

AB0720	1	<i>fur1</i>	gi 57168539 ref ZP_00367672.1	Campylobacter coli RM2228	E-value = 6.00E-26	Identity = 40.14%
	2		gi 15791767 ref NP_281590.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-26	Identity = 40.69%
	3		gi 57237455 ref YP_178468.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 8.00E-26	Identity = 41.33%
	4		gi 5111113 emb CAA84528.1	Campylobacter jejuni	E-value = 1.00E-25	Identity = 40.69%
	5		gi 57241807 ref ZP_00369751.1	Campylobacter lari RM2100	E-value = 1.00E-25	Identity = 40.14%
AB0721	1			*** No matches found ***		
AB0722	1	<i>fumC</i>	gi 118474555 ref YP_892133.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 77.11%
	2		gi 154173867 ref YP_001407615.1	Campylobacter curvus 525.92	E-value = 0	Identity = 76.89%
	3		gi 152992171 ref YP_001357892.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 71.27%
	4		gi 78777247 ref YP_393562.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 67.60%
	5		gi 148926719 ref ZP_01810399.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 4.00E-174	Identity = 66.52%
AB0723	1			*** No matches found ***		
AB0724	1			*** No matches found ***		
AB0725	1		gi 34558244 ref NP_908059.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-43	Identity = 37.66%
	2		gi 152990261 ref YP_001355983.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-25	Identity = 32.72%
	3		gi 152993617 ref YP_001359338.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-24	Identity = 31.88%
	4		gi 78776815 ref YP_393130.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-22	Identity = 26.75%
	5		gi 13472734 ref NP_104301.1	Mesorhizobium loti MAFF303099	E-value = 2.00E-12	Identity = 27.04%
AB0726	1	<i>bfrE</i>	gi 114798931 ref YP_760813.1	Hyphomonas neptunium ATCC 15444	E-value = 5.00E-142	Identity = 44.70%
	2		gi 134096547 ref YP_001101622.1	Hermiimonas arsenicoxydans	E-value = 3.00E-138	Identity = 41.34%
	3		gi 152980420 ref YP_001355311.1	Janthinobacterium sp. Marseille	E-value = 5.00E-135	Identity = 42.95%
	4		gi 152980708 ref YP_001355309.1	Janthinobacterium sp. Marseille	E-value = 4.00E-130	Identity = 41.38%
	5		gi 124268908 ref YP_001022912.1	Methylibium petroleiphilum PM1	E-value = 1.00E-129	Identity = 40.33%
AB0727	1		gi 124483394 emb CAM32570.1	Herbaspirillum seropedicae	E-value = 1.00E-73	Identity = 57.52%
	2		gi 152979871 ref YP_001355310.1	Janthinobacterium sp. Marseille	E-value = 6.00E-69	Identity = 52.23%
	3		gi 118049576 ref ZP_01518127.1	Comamonas testosteroni KF-1	E-value = 7.00E-69	Identity = 52.00%
	4		gi 134096546 ref YP_001101621.1	Hermiimonas arsenicoxydans	E-value = 4.00E-68	Identity = 52.47%
	5		gi 124268909 ref YP_001022913.1	Methylibium petroleiphilum PM1	E-value = 2.00E-67	Identity = 50.88%
AB0728	1		gi 146305839 ref YP_001186304.1	Pseudomonas mendocina ymp	E-value = 5.00E-103	Identity = 48.61%
	2		gi 67156232 ref ZP_00417858.1	Azotobacter vinelandii AvOP	E-value = 2.00E-102	Identity = 48.89%
	3		gi 154250834 ref YP_001411658.1	Parvibaculum lavamentivorans DS-1	E-value = 3.00E-97	Identity = 46.70%
	4		gi 75674899 ref YP_317320.1	Nitrobacter winogradskyi Nb-255	E-value = 3.00E-95	Identity = 49.30%
	5		gi 121605455 ref YP_982784.1	Polaromonas naphthalenivorans CJ2	E-value = 4.00E-89	Identity = 44.38%
AB0729	1	<i>irgA</i>	gi 120556201 ref YP_960552.1	Marinobacter aquaeolei VT8	E-value = 6.00E-117	Identity = 39.24%
	2		gi 37526740 ref NP_930084.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 3.00E-112	Identity = 36.35%
	3		gi 92114796 ref YP_574724.1	Chromohalobacter salexigens DSM 3043	E-value = 2.00E-110	Identity = 37.41%
	4		gi 153002619 ref YP_001368300.1	Shewanella baltica OS185	E-value = 1.00E-109	Identity = 37.56%
	5		gi 113950813 ref ZP_01436425.1	Shewanella baltica OS195	E-value = 2.00E-109	Identity = 37.56%
AB0730	1		gi 152976121 ref YP_001375638.1	Bacillus cereus subsp. cytotoxis NVH 391-98	E-value = 5.00E-32	Identity = 37.80%
	2		gi 154687307 ref YP_001422468.1	Bacillus amyloliquefaciens FZB42	E-value = 1.00E-31	Identity = 37.44%
	3		gi 49479432 ref YP_037799.1	Bacillus thuringiensis serovar konkukian str. 97-27	E-value = 1.00E-30	Identity = 35.87%
	4		gi 118478955 ref YP_896106.1	Bacillus thuringiensis str. Al Hakam	E-value = 2.00E-30	Identity = 35.87%
	5		gi 30263736 ref NP_846113.1	Bacillus anthracis str. Ames	E-value = 5.00E-30	Identity = 35.87%
AB0731	1		gi 46241706 gb AAS83091.1	Azospirillum brasilense	E-value = 5.00E-40	Identity = 29.08%
	2		gi 34763057 ref ZP_00144031.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 2.00E-19	Identity = 27.34%
AB0732	1		gi 34557763 ref NP_907578.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-32	Identity = 33.33%
	2		gi 34557758 ref NP_907573.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-27	Identity = 29.09%
	3		gi 95928256 ref ZP_01311004.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-17	Identity = 27.80%
	4		gi 21241046 ref NP_640628.1	Xanthomonas axonopodis pv. citri str. 306	E-value = 4.00E-17	Identity = 29.25%

AB0733	5	gi 78045836 ref YP_362011.1	Xanthomonas campestris pv. vesicatoria str. 85-10	E-value = 4.00E-17	Identity = 28.77%
	1	gi 121529643 ref ZP_01662254.1	Ralstonia pickettii 12J	E-value = 1.00E-41	Identity = 27.45%
	2	gi 86751344 ref YP_487840.1	Rhodopseudomonas palustris HaA2	E-value = 1.00E-38	Identity = 27.45%
	3	gi 154173846 ref YP_001407610.1	Campylobacter curvus 525.92	E-value = 1.00E-36	Identity = 28.37%
	4	gi 27383078 ref NP_774607.1	Bradyrhizobium japonicum USDA 110	E-value = 4.00E-34	Identity = 25.88%
	5	gi 154173992 ref YP_001409200.1	Campylobacter curvus 525.92	E-value = 9.00E-33	Identity = 27.05%
AB0734	1	gi 57242216 ref ZP_00370155.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-16	Identity = 68.75%
	2	gi 121612197 ref YP_001000590.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 4.00E-15	Identity = 69.84%
	3	gi 15792245 ref NP_282068.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-15	Identity = 69.84%
	4	gi 57504974 ref ZP_00370926.1	Campylobacter coli RM2228	E-value = 7.00E-15	Identity = 69.84%
	5	gi 153951104 ref YP_001398014.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 4.00E-14	Identity = 68.25%
AB0735	1	gi 57242215 ref ZP_00370154.1	Campylobacter upsaliensis RM3195	E-value = 0	Identity = 85.9%
	2	gi 57504975 ref ZP_00370927.1	Campylobacter coli RM2228	E-value = 0	Identity = 83.91%
	3	gi 121613419 ref YP_001000591.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 0	Identity = 84.48%
	4	gi 148926598 ref ZP_01810280.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 0	Identity = 84.2%
	5	gi 57237745 ref YP_178993.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 0	Identity = 84.48%
AB0736	1	gi 152990452 ref YP_001356174.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-152	Identity = 75.75%
	2	gi 152992243 ref YP_001357964.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-143	Identity = 71.47%
	3	gi 154175179 ref YP_001407931.1	Campylobacter curvus 525.92	E-value = 5.00E-142	Identity = 71.47%
	4	gi 149193707 ref ZP_01870805.1	Caminiabacter mediatlanticus TB-2	E-value = 2.00E-141	Identity = 70.68%
	5	gi 157164621 ref YP_001466472.1	Campylobacter concisus 13826	E-value = 4.00E-140	Identity = 70.11%
AB0737	1	gi 78777397 ref YP_393712.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-56	Identity = 45.32%
	2	gi 78776743 ref YP_393058.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-34	Identity = 32.95%
	3	gi 154175137 ref YP_001407999.1	Campylobacter curvus 525.92	E-value = 5.00E-30	Identity = 31.23%
	4	gi 157165151 ref YP_001467161.1	Campylobacter concisus 13826	E-value = 5.00E-28	Identity = 30.86%
	5	gi 34558171 ref NP_907986.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-26	Identity = 27.88%
AB0738	1	gi 157165659 ref YP_001466364.1	Campylobacter concisus 13826	E-value = 1.00E-51	Identity = 50.24%
	2	gi 154148067 ref YP_001406809.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-51	Identity = 47.80%
	3	gi 34556607 ref NP_906422.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-50	Identity = 47.80%
	4	gi 15791508 ref NP_281331.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-49	Identity = 50.24%
	5	gi 86151188 ref ZP_01069403.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 8.00E-49	Identity = 50.24%
AB0739	1		*** No matches found ***		
AB0740	1	gi 78188262 ref YP_378600.1	Chlorobium chlorochromatii CaD3	E-value = 1.00E-30	Identity = 59.80%
	2	gi 149927986 ref ZP_01916235.1	Limnobacter sp. MED105	E-value = 2.00E-29	Identity = 55.34%
	3	gi 78778296 ref YP_394611.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-28	Identity = 51.46%
	4	gi 77918942 ref YP_356757.1	Pelobacter carbinolicus DSM 2380	E-value = 9.00E-27	Identity = 50.96%
	5	gi 148264277 ref YP_001230983.1	Geobacter uraniumreducens Rf4	E-value = 1.00E-26	Identity = 52.43%
AB0741	1	gi 34556998 ref NP_906813.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-35	Identity = 40.69%
AB0742	1		*** No matches found ***		
AB0743	1	gi 152990440 ref YP_001356162.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-75	Identity = 51.65%
	2	gi 78777229 ref YP_393544.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-73	Identity = 51.65%
	3	gi 57168997 ref ZP_00368126.1	Campylobacter coli RM2228	E-value = 3.00E-72	Identity = 54.74%
	4	gi 86152891 ref ZP_01071096.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-71	Identity = 55.11%
	5	gi 148925630 ref ZP_01809318.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 9.00E-71	Identity = 54.38%
AB0744	1	gi 78777230 ref YP_393545.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-104	Identity = 54.78%
	2	gi 152990441 ref YP_001356163.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-103	Identity = 54.73%
	3	gi 34557593 ref NP_907408.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-95	Identity = 51.97%
	4	gi 152992784 ref YP_001358505.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-91	Identity = 51.18%
	5	gi 32267014 ref NP_861046.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-87	Identity = 44.82%



AB0745	1			*** No matches found ***		
AB0746	1			*** No matches found ***		
AB0747	1	<i>ruvA</i>	gi 152992417 ref YP_001358138.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-55	Identity = 63.98%
	2		gi 152990842 ref YP_001356564.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-54	Identity = 60.00%
	3		gi 34556867 ref NP_906682.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-48	Identity = 53.76%
	4		gi 78777407 ref YP_393722.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-46	Identity = 56.68%
	5		gi 32266013 ref NP_860045.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-37	Identity = 47.18%
AB0748	1	<i>ddlA</i>	gi 34556865 ref NP_906680.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-105	Identity = 57.47%
	2		gi 152991773 ref YP_001357494.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-101	Identity = 56.73%
	3		gi 32265630 ref NP_859662.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-96	Identity = 54.26%
	4		gi 153952610 ref YP_001398281.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-91	Identity = 51.72%
	5		gi 86152116 ref ZP_01070328.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 7.00E-91	Identity = 52.01%
AB0749	1		gi 152990838 ref YP_001356560.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-67	Identity = 54.04%
	2		gi 154174769 ref YP_001408217.1	Campylobacter curvus 525.92	E-value = 3.00E-64	Identity = 53.36%
	3		gi 78777405 ref YP_393720.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-62	Identity = 52.54%
	4		gi 152992425 ref YP_001358146.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-60	Identity = 50.42%
	5		gi 118475498 ref YP_891985.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-57	Identity = 50.21%
AB0750	1	<i>murF</i>	gi 78777404 ref YP_393719.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-129	Identity = 50.95%
	2		gi 34556863 ref NP_906678.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-121	Identity = 46.56%
	3		gi 157165282 ref YP_001466906.1	Campylobacter concisus 13826	E-value = 1.00E-118	Identity = 49.79%
	4		gi 152992426 ref YP_001358147.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-118	Identity = 45.77%
	5		gi 152990837 ref YP_001356559.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-117	Identity = 46.86%
AB0751	1		gi 78777401 ref YP_393716.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-45	Identity = 50.63%
	2		gi 57505406 ref ZP_00371334.1	Campylobacter upsaliensis RM3195	E-value = 5.00E-44	Identity = 55.19%
	3		gi 157164691 ref YP_001466732.1	Campylobacter concisus 13826	E-value = 6.00E-43	Identity = 54.19%
	4		gi 57240337 ref ZP_00368286.1	Campylobacter lari RM2100	E-value = 7.00E-43	Identity = 56.49%
	5		gi 152990835 ref YP_001356557.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-42	Identity = 55.97%
AB0752	1			*** No matches found ***		
AB0753	1		gi 119510183 ref ZP_01629321.1	Nodularia spumigena CCY9414	E-value = 1.00E-07	Identity = 25.00%
AB0754	1	<i>rpsJ</i>	gi 154174951 ref YP_001409154.1	Campylobacter curvus 525.92	E-value = 7.00E-38	Identity = 80.20%
	2		gi 152989971 ref YP_001355693.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-37	Identity = 85.44%
	3		gi 154148252 ref YP_001405696.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-36	Identity = 77.67%
	4		gi 153952248 ref YP_001398987.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-36	Identity = 81.55%
	5		gi 78776486 ref YP_392801.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-36	Identity = 90.10%
AB0755	1	<i>rpIC</i>	gi 78776487 ref YP_392802.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-70	Identity = 73.30%
	2		gi 34558027 ref NP_907842.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-66	Identity = 71.35%
	3		gi 57238730 ref YP_179845.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-63	Identity = 66.49%
	4		gi 15793010 ref NP_282833.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-63	Identity = 65.97%
	5		gi 152989972 ref YP_001355694.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-63	Identity = 64.58%
AB0756	1	<i>rpID</i>	gi 154174036 ref YP_001409152.1	Campylobacter curvus 525.92	E-value = 3.00E-61	Identity = 63.24%
	2		gi 34558026 ref NP_907841.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-60	Identity = 61.76%
	3		gi 157164387 ref YP_001467719.1	Campylobacter concisus 13826	E-value = 4.00E-59	Identity = 61.27%
	4		gi 15793009 ref NP_282832.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-59	Identity = 62.75%
	5		gi 121612191 ref YP_001001350.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 5.00E-59	Identity = 62.75%
AB0757	1	<i>rpIW</i>	gi 118474455 ref YP_891246.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-30	Identity = 73.12%
	2		gi 57504696 ref ZP_00370774.1	Campylobacter coli RM2228	E-value = 6.00E-30	Identity = 70.97%
	3		gi 86152332 ref ZP_01070543.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 7.00E-30	Identity = 70.97%
	4		gi 78776489 ref YP_392804.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-30	Identity = 70.65%
	5		gi 15793008 ref NP_282831.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-29	Identity = 68.82%

AB0758	1	<i>rplB</i>	gi 152989975 ref YP_001355697.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-122	Identity = 81.45%
			gi 152993896 ref YP_001359617.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-121	Identity = 79.64%
			gi 118474857 ref YP_891247.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-115	Identity = 77.74%
			gi 57241623 ref ZP_00369568.1	Campylobacter lari RM2100	E-value = 5.00E-112	Identity = 75.55%
			gi 78776490 ref YP_392805.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-112	Identity = 75.91%
AB0759	1	<i>rpsS</i>	gi 118474223 ref YP_891248.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-35	Identity = 80.00%
			gi 78776491 ref YP_392806.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-35	Identity = 82.42%
			gi 57504694 ref ZP_00370772.1	Campylobacter coli RM2228	E-value = 2.00E-35	Identity = 80.00%
			gi 157165068 ref YP_001467716.1	Campylobacter concisus 13826	E-value = 2.00E-35	Identity = 80.00%
			gi 152989976 ref YP_001355698.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-35	Identity = 84.44%
AB0760	1	<i>rplV</i>	gi 78776492 ref YP_392807.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-29	Identity = 73.53%
			gi 152989977 ref YP_001355699.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-28	Identity = 69.90%
			gi 152993898 ref YP_001359619.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-27	Identity = 70.09%
			gi 34558022 ref NP_907837.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-27	Identity = 67.29%
			gi 154173740 ref YP_001409149.1	Campylobacter curvus 525.92	E-value = 5.00E-27	Identity = 65.42%
AB0761	1	<i>rpsC</i>	gi 78776493 ref YP_392808.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-91	Identity = 78.70%
			gi 152989978 ref YP_001355700.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-86	Identity = 79.82%
			gi 154174323 ref YP_001409148.1	Campylobacter curvus 525.92	E-value = 3.00E-86	Identity = 76.50%
			gi 152993899 ref YP_001359620.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-86	Identity = 75.21%
			gi 118474301 ref YP_891250.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-85	Identity = 76.07%
AB0762	1	<i>rplP</i>	gi 34558020 ref NP_907835.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-56	Identity = 82.98%
			gi 109946766 ref YP_663994.1	Helicobacter acinonychis str. Sheeba	E-value = 7.00E-55	Identity = 80.85%
			gi 15645925 ref NP_208104.1	Helicobacter pylori 26695	E-value = 8.00E-55	Identity = 80.14%
			gi 15612297 ref NP_223950.1	Helicobacter pylori J99	E-value = 2.00E-54	Identity = 79.43%
			gi 152989979 ref YP_001355701.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-53	Identity = 79.43%
AB0763	1	<i>rpmC</i>	gi 152993901 ref YP_001359622.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-05	Identity = 72.58%
			gi 157164401 ref YP_001467712.1	Campylobacter concisus 13826	E-value = 2.00E-05	Identity = 60.66%
			gi 118474438 ref YP_891252.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-05	Identity = 62.30%
AB0764	1	<i>rpsQ</i>	gi 154174249 ref YP_001409145.1	Campylobacter curvus 525.92	E-value = 4.00E-24	Identity = 71.08%
			gi 57241617 ref ZP_00369562.1	Campylobacter lari RM2100	E-value = 3.00E-23	Identity = 75.90%
			gi 157165212 ref YP_001467711.1	Campylobacter concisus 13826	E-value = 1.00E-22	Identity = 67.47%
			gi 152993902 ref YP_001359623.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-22	Identity = 79.49%
			gi 78776496 ref YP_392811.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-22	Identity = 76.92%
AB0765	1	<i>rplN</i>	gi 34558018 ref NP_907833.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-50	Identity = 90.98%
			gi 57241616 ref ZP_00369561.1	Campylobacter lari RM2100	E-value = 9.00E-50	Identity = 88.52%
			gi 57505346 ref ZP_00371275.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-49	Identity = 89.34%
			gi 149195487 ref ZP_01872565.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-49	Identity = 88.52%
			gi 15793000 ref NP_282823.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-49	Identity = 87.70%
AB0766	1	<i>rplX</i>	gi 57505345 ref ZP_00371274.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-15	Identity = 77.63%
			gi 152989983 ref YP_001355705.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-15	Identity = 76.00%
			gi 15792999 ref NP_282822.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 8.00E-15	Identity = 74.03%
			gi 107784838 gb ABF83910.1	Campylobacter jejuni subsp. doylei	E-value = 1.00E-14	Identity = 74.03%
			gi 153951584 ref YP_001398975.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-14	Identity = 72.73%
AB0767	1	<i>rplE</i>	gi 157164844 ref YP_001467708.1	Campylobacter concisus 13826	E-value = 1.00E-63	Identity = 71.67%
			gi 118474581 ref YP_891256.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-63	Identity = 70.95%
			gi 15792998 ref NP_282821.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-63	Identity = 71.51%
			gi 152989984 ref YP_001355706.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-63	Identity = 68.51%
			gi 57504686 ref ZP_00370764.1	Campylobacter coli RM2228	E-value = 4.00E-63	Identity = 70.95%
AB0768	1	<i>rpsN</i>	gi 152993906 ref YP_001359627.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-20	Identity = 85.25%

	2	gi 157165464 ref YP_001467707.1	Campylobacter concisus 13826	E-value = 8.00E-20	Identity = 81.97%
	3	gi 57505343 ref ZP_00371272.1	Campylobacter upsaliensis RM3195	E-value = 8.00E-20	Identity = 80.33%
	4	gi 57241613 ref ZP_00369558.1	Campylobacter lari RM2100	E-value = 9.00E-20	Identity = 81.97%
	5	gi 149195484 ref ZP_01872562.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-19	Identity = 85.25%
AB0769	1	<i>rpsH</i> gi 57241612 ref ZP_00369557.1	Campylobacter lari RM2100	E-value = 3.00E-39	Identity = 65.91%
	2	gi 152993907 ref YP_001359628.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-39	Identity = 62.88%
	3	gi 148926784 ref ZP_01810463.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 4.00E-38	Identity = 62.88%
	4	gi 32266891 ref NP_860923.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-38	Identity = 63.64%
	5	gi 57504684 ref ZP_00370762.1	Campylobacter coli RM2228	E-value = 7.00E-38	Identity = 63.64%
AB0770	1	<i>rplF</i> gi 118475079 ref YP_891259.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-57	Identity = 64.61%
	2	gi 34558014 ref NP_907829.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-56	Identity = 63.48%
	3	gi 15792995 ref NP_282818.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-55	Identity = 61.24%
	4	gi 154148630 ref YP_001405712.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-55	Identity = 61.80%
	5	gi 57241611 ref ZP_00369556.1	Campylobacter lari RM2100	E-value = 4.00E-55	Identity = 62.92%
AB0771	1	<i>rplR</i> gi 34558013 ref NP_907828.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-30	Identity = 67.24%
	2	gi 32266893 ref NP_860925.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-29	Identity = 64.66%
	3	gi 152989988 ref YP_001355710.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-27	Identity = 61.54%
	4	gi 15645916 ref NP_208095.1	Helicobacter pylori 26695	E-value = 6.00E-25	Identity = 55.46%
	5	gi 152993909 ref YP_001359630.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-25	Identity = 57.66%
AB0772	1	<i>rpsE</i> gi 109946775 ref YP_664003.1	Helicobacter acinonychis str. Sheeba	E-value = 5.00E-54	Identity = 77.78%
	2	gi 15612287 ref NP_223940.1	Helicobacter pylori J99	E-value = 5.00E-54	Identity = 78.47%
	3	gi 78776504 ref YP_392819.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-53	Identity = 79.45%
	4	gi 32266894 ref NP_860926.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-53	Identity = 76.71%
	5	gi 152989989 ref YP_001355711.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-53	Identity = 78.32%
AB0773	1	<i>rplO</i> gi 152993911 ref YP_001359632.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-37	Identity = 71.21%
	2	gi 118474217 ref YP_891262.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-35	Identity = 70.99%
	3	gi 152989990 ref YP_001355712.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-35	Identity = 62.88%
	4	gi 154173917 ref YP_001409136.1	Campylobacter curvus 525.92	E-value = 3.00E-35	Identity = 68.70%
	5	gi 157165477 ref YP_001467702.1	Campylobacter concisus 13826	E-value = 2.00E-34	Identity = 67.94%
AB0774	1	<i>secY</i> gi 57241607 ref ZP_00369552.1	Campylobacter lari RM2100	E-value = 4.00E-169	Identity = 78.57%
	2	gi 152989991 ref YP_001355713.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-169	Identity = 78.81%
	3	gi 118474381 ref YP_891263.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-167	Identity = 79.76%
	4	gi 121612558 ref YP_001001332.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 3.00E-163	Identity = 74.58%
	5	gi 57504679 ref ZP_00370757.1	Campylobacter coli RM2228	E-value = 4.00E-163	Identity = 75.53%
AB0775	1	<i>map</i> gi 152989992 ref YP_001355714.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-104	Identity = 70.36%
	2	gi 78776507 ref YP_392822.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-99	Identity = 68.80%
	3	gi 152993913 ref YP_001359634.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-94	Identity = 65.22%
	4	gi 121612289 ref YP_001001294.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-92	Identity = 65.86%
	5	gi 86152260 ref ZP_01070471.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-92	Identity = 65.86%
AB0776	1	<i>infA</i> gi 152993914 ref YP_001359635.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-27	Identity = 86.11%
	2	gi 78776508 ref YP_392823.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-27	Identity = 81.94%
	3	gi 152989993 ref YP_001355715.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-27	Identity = 87.50%
	4	gi 34558008 ref NP_907823.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-26	Identity = 84.72%
	5	gi 32266898 ref NP_860930.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-26	Identity = 83.33%
AB0777	1	gi 152990436 ref YP_001356158.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-43	Identity = 46.20%
	2	gi 149194079 ref ZP_01871177.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-42	Identity = 45.41%
	3	gi 152992742 ref YP_001358463.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-42	Identity = 44.33%
	4	gi 78777161 ref YP_393476.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-38	Identity = 43.63%
	5	gi 154248846 ref YP_001409671.1	Fervidobacterium nodosum Rt17-B1	E-value = 2.00E-28	Identity = 37.77%

AB0778	1	gi 118474499 ref YP_891736.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-37	Identity = 33.44%
	2	gi 34557600 ref NP_907415.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-35	Identity = 30.60%
	3	gi 57241028 ref ZP_00368975.1	Campylobacter lari RM2100	E-value = 1.00E-31	Identity = 32.37%
	4	gi 57167871 ref ZP_00367011.1	Campylobacter coli RM2228	E-value = 8.00E-30	Identity = 31.49%
	5	gi 86151094 ref ZP_01069310.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 9.00E-30	Identity = 27.72%
AB0779	1	aspS gi 152993093 ref YP_001358814.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 76.37%
	2	gi 78777284 ref YP_393599.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 68.55%
	3	gi 57241119 ref ZP_00369066.1	Campylobacter lari RM2100	E-value = 0	Identity = 68.43%
	4	gi 121612173 ref YP_001000341.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 0	Identity = 67.69%
	5	gi 157414919 ref YP_001482175.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 0	Identity = 67.69%
AB0780	1	gi 94263847 ref ZP_01287652.1	delta proteobacterium MLMS-1	E-value = 3.00E-171	Identity = 38.09%
	2	gi 94266908 ref ZP_01290563.1	delta proteobacterium MLMS-1	E-value = 5.00E-171	Identity = 38.41%
	3	gi 119898573 ref YP_933786.1	Azoarcus sp. BH72	E-value = 7.00E-157	Identity = 36.71%
	4	gi 91776113 ref YP_545869.1	Methylobacillus flagellatus KT	E-value = 3.00E-152	Identity = 36.74%
	5	gi 71906710 ref YP_284297.1	Dechloromonas aromatica RCB	E-value = 1.00E-143	Identity = 35.65%
AB0781	1	gi 148323922 gb EDK89172.1	Fusobacterium nucleatum subsp. polymorphum ATCC 10953	E-value = 0	Identity = 59.72%
	2	gi 157404678 gb EDO70714.1	Dehalococcoides sp. VS	E-value = 0	Identity = 57.04%
	3	gi 34763472 ref ZP_00144417.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 0	Identity = 59.54%
	4	gi 19704069 ref NP_603631.1	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	E-value = 0	Identity = 59.54%
	5	gi 152993218 ref YP_001358939.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 57.29%
AB0782	1	adk1 gi 28212159 ref NP_783103.1	Clostridium tetani E88	E-value = 2.00E-68	Identity = 57.28%
	2	gi 121534654 ref ZP_01666475.1	Thermosinus carboxydivorans Nor1	E-value = 6.00E-67	Identity = 54.25%
	3	gi 20089966 ref NP_616041.1	Methanosarcina acetivorans C2A	E-value = 9.00E-67	Identity = 56.81%
	4	gi 124522588 ref ZP_01697117.1	Bacillus coagulans 36D1	E-value = 1.00E-66	Identity = 55.40%
	5	gi 153940386 ref YP_001392813.1	Clostridium botulinum F str. Langeland	E-value = 4.00E-66	Identity = 55.40%
AB0783	1	adk2 gi 78777285 ref YP_393600.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-61	Identity = 66.14%
	2	gi 57241118 ref ZP_00369065.1	Campylobacter lari RM2100	E-value = 2.00E-59	Identity = 63.78%
	3	gi 34558089 ref NP_907904.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-59	Identity = 64.21%
	4	gi 32267270 ref NP_861302.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-58	Identity = 62.63%
	5	gi 57167665 ref ZP_00366805.1	Campylobacter coli RM2228	E-value = 1.00E-56	Identity = 63.44%
AB0784	1	gi 152990515 ref YP_001356237.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-70	Identity = 57.33%
	2	gi 34558090 ref NP_907905.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-58	Identity = 53.27%
	3	gi 78777288 ref YP_393603.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-57	Identity = 50.00%
	4	gi 152993294 ref YP_001359015.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-55	Identity = 46.28%
	5	gi 77164862 ref YP_343387.1	Nitrosococcus oceani ATCC 19707	E-value = 6.00E-28	Identity = 38.76%
AB0785	1	cat gi 37526342 ref NP_929686.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 9.00E-59	Identity = 52.86%
	2	gi 115686 sp P00484 CAT3_ECOLI	Plasmid R387 (Escherichia coli)	E-value = 9.00E-57	Identity = 49.77%
	3	gi 115683 sp P22616 CAT2_HAEIN	Haemophilus influenzae	E-value = 2.00E-56	Identity = 46.89%
	4	gi 12084929 ref NP_073222.1	Mannheimia haemolytica	E-value = 2.00E-56	Identity = 49.30%
	5	gi 119633061 ref YP_918951.1	Vibrio sp. TC68	E-value = 5.00E-56	Identity = 46.41%
AB0786	1	gi 86142577 ref ZP_01061016.1	Flavobacterium sp. MED217	E-value = 1.00E-135	Identity = 59.95%
	2	gi 73668313 ref YP_304328.1	Methanosarcina barkeri str. Fusaro	E-value = 2.00E-124	Identity = 61.43%
	3	gi 20089298 ref NP_615373.1	Methanosarcina acetivorans C2A	E-value = 7.00E-123	Identity = 61.43%
	4	gi 119963254 ref YP_947785.1	Arthrobacter aurescens TC1	E-value = 1.00E-82	Identity = 45.64%
	5	gi 116668823 ref YP_829756.1	Arthrobacter sp. FB24	E-value = 2.00E-81	Identity = 44.38%
AB0787	1	gi 14626715 gb AAK71638.1 AF388671_1	Aeromonas hydrophila	E-value = 7.00E-133	Identity = 61.16%
	2	gi 118475707 ref YP_892440.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-127	Identity = 60.58%
	3	gi 154174869 ref YP_001407341.1	Campylobacter curvus 525.92	E-value = 5.00E-125	Identity = 62.61%
	4	gi 157163944 ref YP_001467811.1	Campylobacter concisus 13826	E-value = 9.00E-122	Identity = 57.41%

	5	gi 118746108 ref ZP_01594062.1	Geobacter lovleyi SZ	E-value = 5.00E-115	Identity = 54.65%
AB0788	1	gi 34557576 ref NP_907391.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-79	Identity = 32.43%
	2	gi 149926851 ref ZP_01915110.1	Limnobacter sp. MED105	E-value = 3.00E-49	Identity = 25.66%
	3	gi 77918940 ref YP_356755.1	Pelobacter carbinolicus DSM 2380	E-value = 2.00E-48	Identity = 28.18%
	4	gi 157376246 ref YP_001474846.1	Shewanella sediminis HAW-EB3	E-value = 3.00E-48	Identity = 27.92%
	5	gi 114562324 ref YP_749837.1	Shewanella frigidimarina NCIMB 400	E-value = 1.00E-47	Identity = 25.51%
AB0789	1 <i>alr</i>	gi 152993699 ref YP_001359420.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-86	Identity = 48.82%
	2	gi 152990104 ref YP_001355826.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-82	Identity = 46.76%
	3	gi 78776580 ref YP_392895.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-81	Identity = 48.67%
	4	gi 154148940 ref YP_001406018.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-80	Identity = 45.43%
	5	gi 154174920 ref YP_001408670.1	Campylobacter curvus 525.92	E-value = 1.00E-78	Identity = 43.53%
AB0790	1 <i>uvrC</i>	gi 152991086 ref YP_001356808.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 55.41%
	2	gi 78776619 ref YP_392934.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-176	Identity = 56.41%
	3	gi 149194567 ref ZP_01871663.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-174	Identity = 55.48%
	4	gi 34557927 ref NP_907742.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-173	Identity = 55.92%
	5	gi 152993484 ref YP_001359205.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-165	Identity = 51.41%
AB0791	1	gi 34557258 ref NP_907073.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-88	Identity = 32.26%
	2	gi 125975509 ref YP_001039419.1	Clostridium thermocellum ATCC 27405	E-value = 2.00E-63	Identity = 29.01%
	3	gi 116251086 ref YP_766924.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 9.00E-62	Identity = 26.95%
	4	gi 57241752 ref ZP_00369697.1	Campylobacter lari RM2100	E-value = 2.00E-58	Identity = 28.08%
	5	gi 32266836 ref NP_860868.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-57	Identity = 26.60%
AB0792	1	gi 157165318 ref YP_001466951.1	Campylobacter concisus 13826	E-value = 2.00E-43	Identity = 32.69%
	2	gi 34558241 ref NP_908056.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-40	Identity = 30.25%
	3	gi 34557328 ref NP_907143.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-39	Identity = 31.25%
	4	gi 34558440 ref NP_908255.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-38	Identity = 27.79%
AB0793	1	gi 34557239 ref NP_907054.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-55	Identity = 31.50%
	2	gi 34557328 ref NP_907143.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-54	Identity = 31.45%
	3	gi 34558241 ref NP_908056.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-54	Identity = 31.29%
	4	gi 21492865 ref NP_659940.1	Rhizobium etli CFN 42	E-value = 3.00E-48	Identity = 25.96%
	5	gi 34558248 ref NP_908063.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-43	Identity = 32.25%
AB0794	1	gi 34557239 ref NP_907054.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-80	Identity = 36.89%
	2	gi 34557328 ref NP_907143.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-46	Identity = 30.29%
	3	gi 34558241 ref NP_908056.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-45	Identity = 31.09%
	4	gi 57505516 ref ZP_00371443.1	Campylobacter upsaliensis RM3195	E-value = 5.00E-43	Identity = 29.66%
AB0795	1	gi 157164104 ref YP_001467231.1	Campylobacter concisus 13826	E-value = 7.00E-33	Identity = 36.70%
	2	gi 154174591 ref YP_001407606.1	Campylobacter curvus 525.92	E-value = 6.00E-32	Identity = 37.73%
	3	gi 78776459 ref YP_392774.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-32	Identity = 40.28%
	4	gi 34556470 ref NP_906285.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-31	Identity = 36.00%
	5	gi 154174786 ref YP_001408696.1	Campylobacter curvus 525.92	E-value = 6.00E-31	Identity = 36.70%
AB0796	1	gi 119483261 ref ZP_01618675.1	Lyngbya sp. PCC 8106	E-value = 8.00E-40	Identity = 34.62%
	2	gi 67924013 ref ZP_00517465.1	Crocospaera watsonii WH 8501	E-value = 3.00E-34	Identity = 32.87%
	3	gi 126659636 ref ZP_01730766.1	Cyanothece sp. CCY0110	E-value = 5.00E-33	Identity = 35.12%
	4	gi 150018233 ref YP_001310487.1	Clostridium beijerinckii NCIMB 8052	E-value = 6.00E-33	Identity = 32.34%
	5	gi 16330677 ref NP_441405.1	Synechocystis sp. PCC 6803	E-value = 1.00E-32	Identity = 29.97%
AB0797	1	gi 82702320 ref YP_411886.1	Nitrosospira multiformis ATCC 25196	E-value = 9.00E-69	Identity = 31.36%
	2	gi 111223594 ref YP_714388.1	Frankia alni ACN14a	E-value = 2.00E-67	Identity = 30.09%
AB0798	1	gi 152993037 ref YP_001358758.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-47	Identity = 69.17%
	2	gi 149195428 ref ZP_01872511.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-40	Identity = 62.60%
	3	gi 15606620 ref NP_214000.1	Aquifex aeolicus VF5	E-value = 2.00E-39	Identity = 62.41%

	4	gi 152991029 ref YP_001356751.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-36	Identity = 58.33%
	5	gi 77166101 ref YP_344626.1	Nitrosococcus oceani ATCC 19707	E-value = 1.00E-32	Identity = 57.36%
AB0799	1	gi 94498997 ref ZP_01305535.1	Oceanobacter sp. RED65	E-value = 1.00E-22	Identity = 30.47%
	2	gi 149276082 ref ZP_01882227.1	Pedobacter sp. BAL39	E-value = 3.00E-12	Identity = 27.27%
AB0800	1	gi 152992407 ref YP_001358128.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-10	Identity = 42.98%
AB0801	1	gi 154149012 ref YP_001405757.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-06	Identity = 36.84%
AB0802	1	gi 152994979 ref YP_001339814.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 79.76%
	2	gi 88798002 ref ZP_01113589.1	Reinekea sp. MED297	E-value = 0	Identity = 81.37%
	3	gi 110835370 ref YP_694229.1	Alcanivorax borkumensis SK2	E-value = 0	Identity = 79.38%
	4	gi 119946607 ref YP_944287.1	Psychromonas ingrahamii 37	E-value = 0	Identity = 78.2%
	5	gi 88793946 ref ZP_01109658.1	Alteromonas macleodii 'Deep ecotype'	E-value = 0	Identity = 77.43%
AB0803	1	gi 90414544 ref ZP_01222518.1	Photobacterium profundum 3TCK	E-value = 4.00E-135	Identity = 52.73%
	2	gi 83647208 ref YP_435643.1	Hahella chejuensis KCTC 2396	E-value = 6.00E-135	Identity = 52.53%
	3	gi 149191434 ref ZP_01869684.1	Vibrio shilonii AK1	E-value = 6.00E-135	Identity = 53.16%
	4	gi 84387635 ref ZP_00990652.1	Vibrio splendidus 12B01	E-value = 7.00E-135	Identity = 52.23%
	5	gi 148979616 ref ZP_01815621.1	Vibrionales bacterium SWAT-3	E-value = 3.00E-133	Identity = 55.51%
AB0804	1	gi 83647207 ref YP_435642.1	Hahella chejuensis KCTC 2396	E-value = 3.00E-135	Identity = 70.11%
	2	gi 94501625 ref ZP_01308141.1	Oceanobacter sp. RED65	E-value = 2.00E-126	Identity = 68.91%
	3	gi 118589403 ref ZP_01546809.1	Stappia aggregata IAM 12614	E-value = 2.00E-126	Identity = 67.44%
	4	gi 120555909 ref YP_960260.1	Marinobacter aquaeolei VT8	E-value = 3.00E-125	Identity = 66.48%
	5	gi 110835372 ref YP_694231.1	Alcanivorax borkumensis SK2	E-value = 6.00E-125	Identity = 67.70%
AB0805	1	gi 89093715 ref ZP_01166662.1	Oceanospirillum sp. MED92	E-value = 2.00E-88	Identity = 66.53%
	2	gi 120555908 ref YP_960259.1	Marinobacter aquaeolei VT8	E-value = 5.00E-88	Identity = 65.86%
	3	gi 152994982 ref YP_001339817.1	Marinomonas sp. MWYL1	E-value = 1.00E-87	Identity = 68.18%
	4	gi 126668638 ref ZP_01739590.1	Marinobacter sp. ELB17	E-value = 3.00E-87	Identity = 66.27%
	5	gi 114319353 ref YP_741036.1	Alkalilimnicola ehrlichei MLHE-1	E-value = 5.00E-87	Identity = 59.35%
AB0806	1	gi 110835374 ref YP_694233.1	Alcanivorax borkumensis SK2	E-value = 3.00E-78	Identity = 60.61%
	2	gi 92114430 ref YP_574358.1	Chromohalobacter salexigens DSM 3043	E-value = 4.00E-75	Identity = 58.05%
	3	gi 149378300 ref ZP_01896009.1	Marinobacter algicola DG893	E-value = 3.00E-74	Identity = 60.34%
	4	gi 149909703 ref ZP_01898355.1	Moritella sp. PE36	E-value = 6.00E-74	Identity = 59.31%
	5	gi 120555907 ref YP_960258.1	Marinobacter aquaeolei VT8	E-value = 2.00E-73	Identity = 59.48%
AB0807	1	gi 149277418 ref ZP_01883559.1	Pedobacter sp. BAL39	E-value = 6.00E-30	Identity = 28.69%
AB0808	1	ureD gi 586169 sp Q07400 URED_BACSB	Bacillus sp. TB-90	E-value = 1.00E-10	Identity = 25.65%
AB0809	1	ureAB gi 118776872 ref XP_306932.3	Anopheles gambiae str. PEST	E-value = 1.00E-62	Identity = 55.56%
	2	gi 15807979 ref NP_285642.1	Deinococcus radiodurans R1	E-value = 3.00E-62	Identity = 54.38%
	3	gi 157407679 gb EDO73680.1	Methylobacterium populi BJ001	E-value = 3.00E-62	Identity = 57.82%
	4	gi 156451974 ref ZP_02058347.1	Methylobacterium chloromethanicum CM4	E-value = 1.00E-61	Identity = 57.62%
	5	gi 85705528 ref ZP_01036626.1	Roseovarius sp. 217	E-value = 1.00E-60	Identity = 54.42%
AB0810	1	ureC gi 42782712 ref NP_979959.1	Bacillus cereus ATCC 10987	E-value = 0	Identity = 64.5%
	2	gi 125974320 ref YP_001038230.1	Clostridium thermocellum ATCC 27405	E-value = 0	Identity = 65.09%
	3	gi 86607525 ref YP_476287.1	Synechococcus sp. JA-2-3B'a(2-13)	E-value = 0	Identity = 62.46%
	4	gi 88793954 ref ZP_01109666.1	Alteromonas macleodii 'Deep ecotype'	E-value = 0	Identity = 64.49%
	5	gi 148979625 ref ZP_01815630.1	Vibrionales bacterium SWAT-3	E-value = 0	Identity = 65.61%
AB0811	1	ureE gi 119946616 ref YP_944296.1	Psychromonas ingrahamii 37	E-value = 4.00E-06	Identity = 29.93%
	2	gi 86609467 ref YP_478229.1	Synechococcus sp. JA-2-3B'a(2-13)	E-value = 8.00E-06	Identity = 27.13%
	3	gi 15612818 ref NP_241121.1	Bacillus halodurans C-125	E-value = 9.00E-06	Identity = 27.74%
AB0812	1	ureF gi 586171 sp Q07402 UREF_BACSB	Bacillus sp. TB-90	E-value = 9.00E-10	Identity = 25.44%
	2	gi 4545297 gb AAD22482.1 AF120718_6	Lactobacillus fermentum	E-value = 2.00E-09	Identity = 25.42%
	3	gi 92089298 ref ZP_01274246.1	Lactobacillus reuteri 100-23	E-value = 6.00E-09	Identity = 25.23%

	4	gi 72004425 ref XP_787021.1	Strongylocentrotus purpuratus	E-value = 3.00E-06	Identity = 25.42%
AB0813	1	gi 15612820 ref NP_241123.1	Bacillus halodurans C-125	E-value = 2.00E-58	Identity = 59.16%
	2	gi 86608358 ref YP_477120.1	Synechococcus sp. JA-2-3B'a(2-13)	E-value = 5.00E-58	Identity = 58.12%
	3	gi 75910832 ref YP_325128.1	Anabaena variabilis ATCC 29413	E-value = 7.00E-58	Identity = 57.07%
	4	gi 32265911 ref NP_859943.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-58	Identity = 60.42%
	5	gi 17228230 ref NP_484778.1	Nostoc sp. PCC 7120	E-value = 1.00E-57	Identity = 57.07%
AB0814	1	gi 71908778 ref YP_286365.1	Dechloromonas aromatica RCB	E-value = 4.00E-23	Identity = 32.97%
AB0815	1	gi 39995315 ref NP_951266.1	Geobacter sulfurreducens PCA	E-value = 1.00E-21	Identity = 31.72%
	2	gi 95929697 ref ZP_01312439.1	Desulfuromonas acetoxidans DSM 684	E-value = 4.00E-19	Identity = 29.89%
	3	gi 113941432 ref ZP_01427231.1	Herpetosiphon aurantiacus ATCC 23779	E-value = 5.00E-15	Identity = 31.25%
	4	gi 149376391 ref ZP_01894153.1	Marinobacter algicola DG893	E-value = 6.00E-15	Identity = 31.58%
	5	gi 71737186 ref YP_276888.1	Pseudomonas syringae pv. phaseolicola 1448A	E-value = 2.00E-14	Identity = 32.76%
AB0816	1	gi 78776735 ref YP_393050.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 65.63%
	2	gi 34557170 ref NP_906985.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 55.17%
	3	gi 146305861 ref YP_001186326.1	Pseudomonas mendocina ymp	E-value = 0	Identity = 54.63%
	4	gi 34495889 ref NP_900104.1	Chromobacterium violaceum ATCC 12472	E-value = 0	Identity = 53.64%
	5	gi 153007721 ref YP_001368936.1	Ochrobactrum anthropi ATCC 49188	E-value = 0	Identity = 52.92%
AB0817	1	gi 78776734 ref YP_393049.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-63	Identity = 43.30%
	2	gi 34557169 ref NP_906984.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-48	Identity = 32.01%
	3	gi 32265674 ref NP_859706.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-42	Identity = 32.10%
	4	gi 149190753 ref ZP_01869019.1	Vibrio shilonii AK1	E-value = 2.00E-41	Identity = 33.72%
	5	gi 91775946 ref YP_545702.1	Methylobacillus flagellatus KT	E-value = 4.00E-41	Identity = 35.52%
AB0818	1	gi 78776733 ref YP_393048.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-69	Identity = 40.00%
	2	gi 78776739 ref YP_393954.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-33	Identity = 28.88%
	3	gi 152991869 ref YP_001357590.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-33	Identity = 29.38%
	4	gi 15645230 ref NP_207400.1	Helicobacter pylori 26695	E-value = 7.00E-26	Identity = 25.13%
	5	gi 3068785 gb AAC14432.1	Helicobacter pylori	E-value = 8.00E-26	Identity = 25.13%
AB0819	1	gi 78776732 ref YP_393047.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-26	Identity = 45.00%
	2	gi 149910873 ref ZP_01899505.1	Moritella sp. PE36	E-value = 5.00E-15	Identity = 37.25%
	3	gi 113939473 ref ZP_01425327.1	Herpetosiphon aurantiacus ATCC 23779	E-value = 1.00E-11	Identity = 34.59%
	4	gi 115423564 emb CAJ50100.1	Bordetella avium 197N	E-value = 4.00E-10	Identity = 29.08%
	5	gi 146339402 ref YP_001204450.1	Bradyrhizobium sp. ORS278	E-value = 6.00E-10	Identity = 31.68%
AB0820	1		*** No matches found ***		
AB0821	1	gi 78777553 ref YP_393868.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-17	Identity = 80.65%
	2	gi 34557799 ref NP_907614.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-08	Identity = 52.46%
AB0822	1		*** No matches found ***		
AB0823	1		*** No matches found ***		
AB0824	1	gi 152992239 ref YP_001357960.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-85	Identity = 61.07%
	2	gi 157164085 ref YP_001465973.1	Campylobacter concisus 13826	E-value = 7.00E-75	Identity = 54.09%
	3	gi 118475279 ref YP_892840.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-73	Identity = 54.09%
	4	gi 57168378 ref ZP_00367512.1	Campylobacter coli RM2228	E-value = 9.00E-72	Identity = 53.31%
	5	gi 57237312 ref YP_178325.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 7.00E-71	Identity = 51.91%
AB0825	1		*** No matches found ***		
AB0826	1	gi 90577398 ref ZP_01233209.1	Vibrio angustum S14	E-value = 1.00E-44	Identity = 48.88%
	2	gi 89072261 ref ZP_01158840.1	Photobacterium sp. SKA34	E-value = 1.00E-43	Identity = 48.43%
	3	gi 149909876 ref ZP_01898526.1	Moritella sp. PE36	E-value = 2.00E-42	Identity = 47.30%
	4	gi 89091888 ref ZP_01164843.1	Oceanospirillum sp. MED92	E-value = 7.00E-28	Identity = 36.82%
	5	gi 119503962 ref ZP_01626043.1	marine gamma proteobacterium HTCC2080	E-value = 1.00E-25	Identity = 32.34%
AB0827	1	gi 90417182 ref ZP_01225109.1	marine gamma proteobacterium HTCC2207	E-value = 2.00E-09	Identity = 45.33%

	2	gi 83856923 ref ZP_00950452.1	Croceibacter atlanticus HTCC2559	E-value = 1.00E-08	Identity = 46.67%
	3	gi 86140976 ref ZP_01059535.1	Flavobacterium sp. MED217	E-value = 1.00E-08	Identity = 44.59%
	4	gi 126663897 ref ZP_01734892.1	Flavobacteria bacterium BAL38	E-value = 9.00E-08	Identity = 43.75%
	5	gi 42522477 ref NP_967857.1	Bdellovibrio bacteriovorus HD100	E-value = 9.00E-07	Identity = 40.74%
AB0828	1	gi 153006041 ref YP_001380366.1	Anaeromyxobacter sp. Fw109-5	E-value = 2.00E-37	Identity = 45.14%
	2	gi 39997424 ref NP_953375.1	Geobacter sulfurreducens PCA	E-value = 5.00E-37	Identity = 50.00%
	3	gi 114773662 ref ZP_01450697.1	alpha proteobacterium HTCC2255	E-value = 2.00E-32	Identity = 44.85%
	4	gi 118035152 ref ZP_01506560.1	Burkholderia phytofirmans PsJN	E-value = 2.00E-32	Identity = 47.65%
	5	gi 91778750 ref YP_553958.1	Burkholderia xenovorans LB400	E-value = 2.00E-32	Identity = 46.06%
AB0829	1	gi 125972928 ref YP_001036838.1	Clostridium thermocellum ATCC 27405	E-value = 2.00E-127	Identity = 59.58%
	2	gi 156718437 ref ZP_02060103.1	Hydrogenobaculum sp. Y04AAS1	E-value = 3.00E-126	Identity = 63.14%
	3	gi 78221351 ref YP_383098.1	Geobacter metallireducens GS-15	E-value = 2.00E-124	Identity = 51.64%
	4	gi 39998418 ref NP_954369.1	Geobacter sulfurreducens PCA	E-value = 5.00E-124	Identity = 51.76%
	5	gi 156866715 gb EDO60087.1	Clostridium leptum DSM 753	E-value = 3.00E-123	Identity = 51.40%
AB0830	1	gi 106895521 ref ZP_01362611.1	Clostridium sp. OhILAs	E-value = 2.00E-28	Identity = 29.29%
	2	gi 134299146 ref YP_001112642.1	Desulfotomaculum reducens MI-1	E-value = 8.00E-26	Identity = 28.75%
	3	gi 125972927 ref YP_001036837.1	Clostridium thermocellum ATCC 27405	E-value = 3.00E-25	Identity = 29.63%
	4	gi 78221352 ref YP_383099.1	Geobacter metallireducens GS-15	E-value = 2.00E-24	Identity = 28.98%
	5	gi 118727500 ref ZP_01576099.1	Clostridium cellulolyticum H10	E-value = 3.00E-24	Identity = 30.58%
AB0831	1	gi 78777130 ref YP_393445.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-149	Identity = 63.72%
	2	gi 152990898 ref YP_001356620.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-134	Identity = 56.33%
	3	gi 152993698 ref YP_001359419.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-128	Identity = 53.85%
	4	gi 34556836 ref NP_906651.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-120	Identity = 53.46%
	5	gi 118580482 ref YP_901732.1	Pelobacter propionicus DSM 2379	E-value = 3.00E-108	Identity = 47.26%
AB0832	1		*** No matches found ***		
AB0833	1	gi 95930967 ref ZP_01313696.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-115	Identity = 57.43%
	2	gi 115377841 ref ZP_01465029.1	Stigmatella aurantiaca DW4/3-1	E-value = 2.00E-56	Identity = 33.90%
	3	gi 78356120 ref YP_387569.1	Desulfovibrio desulfuricans G20	E-value = 8.00E-56	Identity = 33.05%
	4	gi 86605819 ref YP_474582.1	Synechococcus sp. JA-3-3Ab	E-value = 9.00E-49	Identity = 33.71%
	5	gi 124522565 ref ZP_01697101.1	Bacillus coagulans 36D1	E-value = 3.00E-45	Identity = 35.87%
AB0834	1	gi 78777133 ref YP_393448.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-37	Identity = 44.74%
	2	gi 148322813 gb EDK88063.1	Fusobacterium nucleatum subsp. polymorphum ATCC 10953	E-value = 6.00E-26	Identity = 36.17%
	3	gi 34763624 ref ZP_00144554.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 2.00E-25	Identity = 34.89%
	4	gi 77408045 ref ZP_00784793.1	Streptococcus agalactiae COH1	E-value = 2.00E-25	Identity = 37.62%
	5	gi 76788683 ref YP_329732.1	Streptococcus agalactiae A909	E-value = 3.00E-25	Identity = 37.62%
AB0835	1	gi 78777132 ref YP_393447.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-57	Identity = 44.14%
	2	gi 83814064 ref YP_444560.1	Salinibacter ruber DSM 13855	E-value = 2.00E-19	Identity = 26.06%
	3	gi 124009718 ref ZP_01694389.1	Microscilla marina ATCC 23134	E-value = 2.00E-17	Identity = 28.12%
	4	gi 29349375 ref NP_812878.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 3.00E-17	Identity = 30.45%
	5	gi 126646794 ref ZP_01719304.1	Algoriphagus sp. PR1	E-value = 1.00E-16	Identity = 31.14%
AB0836	1	gi 78777131 ref YP_393446.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-79	Identity = 39.74%
	2	gi 124515770 gb EAY57279.1	Leptospirillum sp. Group II UBA	E-value = 2.00E-36	Identity = 28.35%
	3	gi 68552563 ref ZP_00591951.1	Prosthecochloris aestuarii DSM 271	E-value = 7.00E-28	Identity = 28.05%
	4	gi 68549638 ref ZP_00589099.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 3.00E-21	Identity = 25.91%
	5	gi 67939520 ref ZP_00532019.1	Chlorobium phaeobacteroides BS1	E-value = 9.00E-21	Identity = 26.82%
AB0837	1	gi 78777808 ref YP_394123.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-97	Identity = 47.26%
	2	gi 34557872 ref NP_907687.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-96	Identity = 41.20%
	3	gi 126663929 ref ZP_01734924.1	Flavobacteria bacterium BAL38	E-value = 2.00E-80	Identity = 41.76%
	4	gi 86134119 ref ZP_01052701.1	Tenacibaculum sp. MED152	E-value = 4.00E-80	Identity = 40.17%



	5	gi 150025093 ref YP_001295919.1	Flavobacterium psychrophilum JIP02/86	E-value = 6.00E-79	Identity = 41.32%
AB0838	1	gi 78486202 ref YP_392127.1	Thiomicrospira crunogena XCL-2	E-value = 9.00E-65	Identity = 38.99%
	2	gi 34557873 ref NP_907688.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-64	Identity = 39.12%
	3	gi 51246429 ref YP_066313.1	Desulfotalea psychrophila LSv54	E-value = 2.00E-61	Identity = 40.69%
	4	gi 118578564 ref YP_899814.1	Pelobacter propionicus DSM 2379	E-value = 9.00E-59	Identity = 37.70%
	5	gi 46581379 ref YP_012187.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 1.00E-57	Identity = 37.11%
AB0839	1	gi 11847421 ref YP_892191.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-53	Identity = 49.00%
	2	gi 152988816 ref YP_001351575.1	Pseudomonas aeruginosa PA7	E-value = 2.00E-45	Identity = 37.04%
	3	gi 117923982 ref YP_864599.1	Magnetococcus sp. MC-1	E-value = 4.00E-45	Identity = 36.49%
	4	gi 15600659 ref NP_254153.1	Pseudomonas aeruginosa PAO1	E-value = 9.00E-45	Identity = 36.73%
	5	gi 149376565 ref ZP_01894325.1	Marinobacter algicola DG893	E-value = 4.00E-44	Identity = 38.70%
AB0840	1	gi 57168961 ref ZP_00368090.1	Campylobacter coli RM2228	E-value = 6.00E-19	Identity = 39.26%
	2	gi 34557099 ref NP_906914.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-14	Identity = 29.70%
	3	gi 153893617 ref ZP_02014292.1	Opitutaceae bacterium TAV2	E-value = 2.00E-13	Identity = 29.24%
	4	gi 15894123 ref NP_347472.1	Clostridium acetobutylicum ATCC 824	E-value = 4.00E-10	Identity = 33.33%
	5	gi 15611463 ref NP_223114.1	Helicobacter pylori J99	E-value = 1.00E-09	Identity = 30.18%
AB0841	1 <i>pgi</i>	gi 78777669 ref YP_393984.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-127	Identity = 60.20%
	2	gi 152993518 ref YP_001359239.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-102	Identity = 51.59%
	3	gi 152992865 ref YP_001358586.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-89	Identity = 46.31%
	4	gi 148244946 ref YP_001219640.1	Candidatus Vesicomysocius okutanii HA	E-value = 5.00E-89	Identity = 48.89%
	5	gi 152990690 ref YP_001356412.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-86	Identity = 47.72%
AB0842	1 <i>galU</i>	gi 34556775 ref NP_906590.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-117	Identity = 76.30%
	2	gi 78777670 ref YP_393985.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-116	Identity = 75.37%
	3	gi 152993519 ref YP_001359240.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-116	Identity = 75.93%
	4	gi 146307378 ref YP_001187843.1	Pseudomonas mendocina ymp	E-value = 6.00E-115	Identity = 72.10%
	5	gi 119478090 ref ZP_01618169.1	marine gamma proteobacterium HTCC2143	E-value = 3.00E-113	Identity = 72.01%
AB0843	1	gi 152991170 ref YP_001356892.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-165	Identity = 64.77%
	2	gi 78776822 ref YP_393137.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-151	Identity = 59.69%
	3	gi 152993517 ref YP_001359238.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-148	Identity = 59.70%
	4	gi 149195311 ref ZP_01872399.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-145	Identity = 59.74%
	5	gi 32266112 ref NP_860144.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-140	Identity = 54.87%
AB0844	1	gi 153869834 ref ZP_01999355.1	Beggiatoa sp. PS	E-value = 2.00E-39	Identity = 32.75%
AB0845	1	gi 78777849 ref YP_394164.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-39	Identity = 64.80%
	2	gi 121605706 ref YP_983035.1	Polaromonas naphthalenivorans CJ2	E-value = 9.00E-30	Identity = 49.23%
	3	gi 152993485 ref YP_001359206.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-28	Identity = 54.17%
	4	gi 89094324 ref ZP_01167265.1	Oceanospirillum sp. MED92	E-value = 5.00E-27	Identity = 50.00%
	5	gi 57505415 ref ZP_00371343.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-26	Identity = 45.86%
AB0846	1	gi 154174478 ref YP_001408754.1	Campylobacter curvus 525.92	E-value = 2.00E-10	Identity = 51.43%
	2	gi 57168158 ref ZP_00367297.1	Campylobacter coli RM2228	E-value = 1.00E-09	Identity = 54.41%
	3	gi 86152979 ref ZP_01071184.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 3.00E-09	Identity = 51.47%
	4	gi 57505648 ref ZP_00371575.1	Campylobacter upsaliensis RM3195	E-value = 5.00E-09	Identity = 56.72%
	5	gi 56962362 ref YP_174087.1	Bacillus clausii KSM-K16	E-value = 7.00E-09	Identity = 52.86%
AB0847	1	gi 95929033 ref ZP_01311778.1	Desulfuromonas acetoxidans DSM 684	E-value = 4.00E-39	Identity = 35.69%
	2	gi 51244145 ref YP_064029.1	Desulfotalea psychrophila LSv54	E-value = 2.00E-38	Identity = 35.21%
	3	gi 89206591 ref ZP_01185147.1	Bacillus weihenstephanensis KBAB4	E-value = 7.00E-35	Identity = 38.60%
	4	gi 1710375 gb AAB47963.1	Bacillus subtilis	E-value = 3.00E-34	Identity = 33.45%
	5	gi 16079720 ref NP_390544.1	Bacillus subtilis subsp. subtilis str. 168	E-value = 6.00E-34	Identity = 33.10%
AB0848	1 <i>trpC</i>	gi 34558206 ref NP_908021.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-81	Identity = 62.75%
	2	gi 154174456 ref YP_001408349.1	Campylobacter curvus 525.92	E-value = 5.00E-79	Identity = 61.39%

	3	gi 152993281 ref YP_001359002.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-79	Identity = 62.40%
	4	gi 152990734 ref YP_001356456.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-78	Identity = 62.55%
	5	gi 121612469 ref YP_001000194.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-73	Identity = 64.37%
AB0849	1	gi 152990735 ref YP_001356457.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-36	Identity = 28.70%
	2	gi 78776929 ref YP_393244.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-36	Identity = 30.63%
	3	gi 152993282 ref YP_001359003.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-32	Identity = 28.97%
	4	gi 34558207 ref NP_908022.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-31	Identity = 27.46%
	5	gi 154148793 ref YP_001406872.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-29	Identity = 29.68%
AB0850	1	gi 152993283 ref YP_001359004.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-33	Identity = 53.72%
	2	gi 78776928 ref YP_393243.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-29	Identity = 48.39%
	3	gi 152990736 ref YP_001356458.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-27	Identity = 49.21%
	4	gi 149194483 ref ZP_01871579.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-26	Identity = 52.46%
	5	gi 157165139 ref YP_001466730.1	Campylobacter concisus 13826	E-value = 6.00E-26	Identity = 46.28%
AB0851	1	gi 152990737 ref YP_001356459.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-56	Identity = 48.10%
	2	gi 78776927 ref YP_393242.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-49	Identity = 48.29%
	3	gi 34558209 ref NP_908024.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-42	Identity = 39.83%
	4	gi 152993284 ref YP_001359005.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-42	Identity = 39.66%
	5	gi 154175164 ref YP_001408352.1	Campylobacter curvus 525.92	E-value = 3.00E-40	Identity = 41.38%
AB0852	1 <i>oorD</i>	gi 34557450 ref NP_907265.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-32	Identity = 65.42%
	2	gi 78777250 ref YP_393565.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-31	Identity = 63.73%
	3	gi 152992174 ref YP_001357895.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-31	Identity = 62.62%
	4	gi 57241287 ref ZP_00369234.1	Campylobacter lari RM2100	E-value = 2.00E-30	Identity = 69.70%
	5	gi 57167580 ref ZP_00366720.1	Campylobacter coli RM2228	E-value = 5.00E-30	Identity = 67.33%
AB0853	1 <i>oorA</i>	gi 152992175 ref YP_001357896.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-147	Identity = 68.82%
	2	gi 118474959 ref YP_892078.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-144	Identity = 66.13%
	3	gi 149194475 ref ZP_01871571.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-143	Identity = 65.44%
	4	gi 86153533 ref ZP_01071737.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 3.00E-140	Identity = 63.98%
	5	gi 57241286 ref ZP_00369233.1	Campylobacter lari RM2100	E-value = 5.00E-140	Identity = 64.52%
AB0854	1 <i>oorB</i>	gi 152990590 ref YP_001356312.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-127	Identity = 73.29%
	2	gi 152992176 ref YP_001357897.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-122	Identity = 72.96%
	3	gi 34557452 ref NP_907267.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-122	Identity = 72.16%
	4	gi 57241285 ref ZP_00369232.1	Campylobacter lari RM2100	E-value = 2.00E-121	Identity = 71.84%
	5	gi 32267067 ref NP_861099.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-120	Identity = 72.45%
AB0855	1 <i>oorC</i>	gi 152992177 ref YP_001357898.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-67	Identity = 74.18%
	2	gi 118475141 ref YP_892076.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-62	Identity = 70.06%
	3	gi 78777253 ref YP_393568.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-62	Identity = 75.14%
	4	gi 32267066 ref NP_861098.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-60	Identity = 68.54%
	5	gi 152990591 ref YP_001356313.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-60	Identity = 65.03%
AB0856	1 <i>dnaQ3</i>	gi 152990071 ref YP_001355793.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-46	Identity = 45.61%
	2	gi 154148582 ref YP_001406342.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-44	Identity = 44.98%
	3	gi 157165763 ref YP_001466765.1	Campylobacter concisus 13826	E-value = 3.00E-43	Identity = 45.86%
	4	gi 152993730 ref YP_001359451.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-42	Identity = 43.58%
	5	gi 78777804 ref YP_394119.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-41	Identity = 45.81%
AB0857	1 <i>trpF</i>	gi 152990070 ref YP_001355792.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-53	Identity = 55.44%
	2	gi 152993731 ref YP_001359452.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-53	Identity = 50.51%
	3	gi 78777803 ref YP_394118.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-51	Identity = 51.30%
	4	gi 34556663 ref NP_906478.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-43	Identity = 45.69%
	5	gi 149195071 ref ZP_01872163.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-43	Identity = 52.33%
AB0858	1 <i>rpe</i>	gi 78777802 ref YP_394117.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-85	Identity = 76.06%

	2	gi 34556662 ref NP_906477.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-84	Identity = 69.48%
	3	gi 152993732 ref YP_001359453.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-78	Identity = 77.46%
	4	gi 154149308 ref YP_001406343.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-77	Identity = 67.14%
	5	gi 149195070 ref ZP_01872162.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-77	Identity = 66.51%
AB0859	1	gi 154173970 ref YP_001409012.1	Campylobacter curvus 525.92	E-value = 4.00E-56	Identity = 40.53%
	2	gi 157164974 ref YP_001467595.1	Campylobacter concisus 13826	E-value = 1.00E-54	Identity = 40.06%
	3	gi 118474551 ref YP_891402.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-52	Identity = 38.86%
	4	gi 154149331 ref YP_001405739.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-51	Identity = 39.18%
	5	gi 88596271 ref ZP_01099508.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 3.00E-44	Identity = 37.83%
AB0860	1	gi 34557700 ref NP_907515.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-15	Identity = 39.17%
	2	gi 152990461 ref YP_001356183.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-14	Identity = 36.84%
	3	gi 152992261 ref YP_001357982.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-14	Identity = 36.28%
	4	gi 154149148 ref YP_001406594.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-14	Identity = 36.17%
	5	gi 149193974 ref ZP_01871072.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-12	Identity = 38.39%
AB0861	1	gi 152993703 ref YP_001359424.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-53	Identity = 54.89%
	2	gi 119947278 ref YP_944958.1	Psychromonas ingrahamii 37	E-value = 4.00E-48	Identity = 50.00%
	3	gi 119947263 ref YP_944943.1	Psychromonas ingrahamii 37	E-value = 9.00E-48	Identity = 50.00%
	4	gi 78776570 ref YP_392885.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-45	Identity = 46.70%
	5	gi 152990094 ref YP_001355816.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-45	Identity = 49.72%
AB0862	1	gi 152991822 ref YP_001357543.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-37	Identity = 64.02%
	2	gi 78776240 ref YP_392555.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-33	Identity = 55.83%
	3	gi 34556535 ref NP_906350.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-30	Identity = 53.29%
	4	gi 154174327 ref YP_001407469.1	Campylobacter curvus 525.92	E-value = 1.00E-28	Identity = 47.53%
	5	gi 157164961 ref YP_001466097.1	Campylobacter concisus 13826	E-value = 3.00E-28	Identity = 47.53%
AB0863	1	gi 24374390 ref NP_718433.1	Shewanella oneidensis MR-1	E-value = 1.00E-30	Identity = 32.96%
	2	gi 118073501 ref ZP_01541681.1	Shewanella woodyi ATCC 51908	E-value = 4.00E-30	Identity = 33.85%
	3	gi 113969853 ref YP_733646.1	Shewanella sp. MR-4	E-value = 2.00E-28	Identity = 30.83%
	4	gi 37525518 ref NP_928862.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 8.00E-28	Identity = 33.33%
	5	gi 114563628 ref YP_751141.1	Shewanella frigidimarina NCIMB 400	E-value = 8.00E-28	Identity = 34.23%
AB0864	1	gi 82702160 ref YP_411726.1	Nitrosospira multiformis ATCC 25196	E-value = 2.00E-16	Identity = 48.72%
	2	gi 45659279 ref YP_003365.1	Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	E-value = 5.00E-15	Identity = 42.98%
	3	gi 24217019 ref NP_714500.1	Leptospira interrogans serovar Lai str. 56601	E-value = 9.00E-15	Identity = 42.98%
	4	gi 77165544 ref YP_344069.1	Nitrosococcus oceani ATCC 19707	E-value = 2.00E-14	Identity = 46.28%
	5	gi 115422966 emb CAJ49496.1	Bordetella avium 197N	E-value = 4.00E-14	Identity = 38.98%
AB0865	1	gi 34558451 ref NP_908266.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-37	Identity = 52.08%
	2	gi 86150785 ref ZP_01069001.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-37	Identity = 53.10%
	3	gi 152993092 ref YP_001358813.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-37	Identity = 53.15%
	4	gi 15792693 ref NP_282516.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-36	Identity = 52.41%
	5	gi 157415608 ref YP_001482864.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-36	Identity = 52.41%
AB0866	1	gi 116187134 ref ZP_01477023.1	Vibrio sp. Ex25	E-value = 7.00E-32	Identity = 44.50%
	2	gi 91224209 ref ZP_01259472.1	Vibrio alginolyticus 12G01	E-value = 9.00E-32	Identity = 43.46%
	3	gi 153831614 ref ZP_01984281.1	Vibrio harveyi HY01	E-value = 6.00E-31	Identity = 41.88%
	4	gi 148975673 ref ZP_01812504.1	Vibrionales bacterium SWAT-3	E-value = 4.00E-30	Identity = 43.98%
	5	gi 84390407 ref ZP_00991418.1	Vibrio splendidus 12B01	E-value = 5.00E-30	Identity = 43.98%
AB0867	1		*** No matches found ***		
AB0868	1	gi 34558498 ref NP_908313.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-70	Identity = 61.01%
	2	gi 152992349 ref YP_001358070.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-70	Identity = 60.00%
	3	gi 78777433 ref YP_393748.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-68	Identity = 60.18%
	4	gi 152990444 ref YP_001356166.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-68	Identity = 58.22%

	5	gi 32267181 ref NP_861213.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-65	Identity = 55.96%
AB0869	1	gi 152992350 ref YP_001358071.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-99	Identity = 53.16%
	2	gi 78777432 ref YP_393747.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-96	Identity = 53.74%
	3	gi 152990445 ref YP_001356167.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-95	Identity = 53.30%
	4	gi 34558497 ref NP_908312.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-90	Identity = 53.74%
	5	gi 149194614 ref ZP_01871710.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-83	Identity = 50.00%
AB0870	1	gi 152992401 ref YP_001358122.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-51	Identity = 62.86%
	2	gi 157164350 ref YP_001466915.1	Campylobacter concisus 13826	E-value = 6.00E-51	Identity = 65.34%
	3	gi 152990446 ref YP_001356168.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-51	Identity = 58.86%
	4	gi 154174159 ref YP_001408200.1	Campylobacter curvus 525.92	E-value = 1.00E-50	Identity = 65.91%
	5	gi 154148964 ref YP_001406173.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-49	Identity = 62.92%
AB0871	1	gi 57505465 ref ZP_00371393.1	Campylobacter upsaliensis RM3195	E-value = 7.00E-107	Identity = 73.36%
	2	gi 86152197 ref ZP_01070409.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-106	Identity = 74.13%
	3	gi 57241095 ref ZP_00369042.1	Campylobacter lari RM2100	E-value = 5.00E-106	Identity = 74.13%
	4	gi 157163926 ref YP_001466914.1	Campylobacter concisus 13826	E-value = 1.00E-104	Identity = 73.54%
	5	gi 154173801 ref YP_001408201.1	Campylobacter curvus 525.92	E-value = 7.00E-104	Identity = 73.93%
AB0872	1	gi 152992403 ref YP_001358124.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-110	Identity = 64.95%
	2	gi 152990448 ref YP_001356170.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-110	Identity = 64.29%
	3	gi 157165445 ref YP_001466913.1	Campylobacter concisus 13826	E-value = 2.00E-107	Identity = 63.79%
	4	gi 57167805 ref ZP_00366945.1	Campylobacter coli RM2228	E-value = 1.00E-106	Identity = 61.64%
	5	gi 154174259 ref YP_001408202.1	Campylobacter curvus 525.92	E-value = 1.00E-106	Identity = 61.99%
AB0873	1	gi 34558493 ref NP_908308.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-163	Identity = 66.91%
	2	gi 152990449 ref YP_001356171.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-160	Identity = 68.37%
	3	gi 78777423 ref YP_393738.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-156	Identity = 64.73%
	4	gi 157164188 ref YP_001466912.1	Campylobacter concisus 13826	E-value = 7.00E-149	Identity = 64.08%
	5	gi 154174701 ref YP_001408203.1	Campylobacter curvus 525.92	E-value = 4.00E-148	Identity = 63.83%
AB0874	1	gi 152992405 ref YP_001358126.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-118	Identity = 59.71%
	2	gi 152990450 ref YP_001356172.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-114	Identity = 56.41%
	3	gi 78777422 ref YP_393737.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-110	Identity = 57.67%
	4	gi 57241098 ref ZP_00369045.1	Campylobacter lari RM2100	E-value = 6.00E-109	Identity = 56.53%
	5	gi 118474237 ref YP_891961.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-108	Identity = 57.39%
AB0875	1	gi 34556696 ref NP_906511.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-171	Identity = 56.48%
	2	gi 154174697 ref YP_001408205.1	Campylobacter curvus 525.92	E-value = 2.00E-170	Identity = 54.67%
	3	gi 118475187 ref YP_891962.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-166	Identity = 53.82%
	4	gi 149194654 ref ZP_01871749.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-158	Identity = 57.02%
	5	gi 157165032 ref YP_001466910.1	Campylobacter concisus 13826	E-value = 3.00E-158	Identity = 54.32%
AB0876	1	gi 78777409 ref YP_393724.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-108	Identity = 57.05%
	2	gi 34556869 ref NP_906684.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-108	Identity = 52.64%
	3	gi 152990844 ref YP_001356566.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-103	Identity = 56.16%
	4	gi 154173819 ref YP_001408207.1	Campylobacter curvus 525.92	E-value = 1.00E-99	Identity = 54.92%
	5	gi 154148088 ref YP_001406166.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-99	Identity = 53.00%
AB0877	1	gi 152993433 ref YP_001359154.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-77	Identity = 36.26%
	2	gi 154149223 ref YP_001406798.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-34	Identity = 29.88%
	3	gi 157164312 ref YP_001467079.1	Campylobacter concisus 13826	E-value = 1.00E-32	Identity = 26.92%
	4	gi 118475423 ref YP_891999.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-27	Identity = 29.43%
	5	gi 154174202 ref YP_001408089.1	Campylobacter curvus 525.92	E-value = 2.00E-26	Identity = 28.06%
AB0878	1	gi 34556965 ref NP_906780.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-25	Identity = 42.31%
	2	gi 32266441 ref NP_860473.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-24	Identity = 40.15%
	3	gi 152992347 ref YP_001358068.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-22	Identity = 44.03%

	4	gi 152990894 ref YP_001356616.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-20	Identity = 40.31%
	5	gi 149194236 ref ZP_01871333.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-19	Identity = 44.03%
AB0879	1	gi 149194504 ref ZP_01871600.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-32	Identity = 60.43%
	2	gi 152992855 ref YP_001358576.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-32	Identity = 57.64%
	3	gi 78777269 ref YP_393584.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-31	Identity = 57.45%
	4	gi 34556974 ref NP_906789.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-28	Identity = 52.90%
	5	gi 57505296 ref ZP_00371225.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-27	Identity = 58.70%
AB0880	1	gi 118027356 ref ZP_01498820.1	Burkholderia phymatum STM815	E-value = 2.00E-20	Identity = 41.98%
	2	gi 83592073 ref YP_425825.1	Rhodospirillum rubrum ATCC 11170	E-value = 2.00E-12	Identity = 33.61%
	3	gi 51894172 ref YP_076863.1	Symbiobacterium thermophilum IAM 14863	E-value = 6.00E-12	Identity = 36.64%
	4	gi 145620473 ref ZP_01776503.1	Geobacter bemidjensis Bem	E-value = 7.00E-12	Identity = 36.29%
	5	gi 147678002 ref YP_001212217.1	Pelotomaculum thermopropionicum SI	E-value = 7.00E-11	Identity = 35.71%
AB0881	1	gi 34557918 ref NP_907733.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-64	Identity = 63.05%
	2	gi 16799459 ref NP_469727.1	Listeria innocua Clip11262	E-value = 3.00E-63	Identity = 62.81%
	3	gi 46906601 ref YP_012990.1	Listeria monocytogenes str. 4b F2365	E-value = 9.00E-62	Identity = 62.31%
	4	gi 16802408 ref NP_463893.1	Listeria monocytogenes EGD-e	E-value = 2.00E-61	Identity = 62.37%
	5	gi 47091501 ref ZP_00229298.1	Listeria monocytogenes str. 4b H7858	E-value = 2.00E-61	Identity = 62.31%
AB0882	1	<i>radA</i> gi 78777040 ref YP_393355.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-167	Identity = 67.26%
	2	gi 86151058 ref ZP_01069274.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-162	Identity = 64.65%
	3	gi 148926208 ref ZP_01809893.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 4.00E-162	Identity = 64.65%
	4	gi 153951878 ref YP_001397703.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 5.00E-162	Identity = 64.21%
	5	gi 15792529 ref NP_282352.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-162	Identity = 64.43%
AB0883	1	gi 152990982 ref YP_001356704.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-31	Identity = 45.11%
	2	gi 118400429 ref XP_001032537.1	Tetrahymena thermophila SB210	E-value = 2.00E-31	Identity = 37.84%
	3	gi 151936884 gb EDN55780.1	Vibrio sp. Ex25	E-value = 1.00E-29	Identity = 39.58%
	4	gi 153835671 ref ZP_01988338.1	Vibrio harveyi HY01	E-value = 3.00E-29	Identity = 39.06%
	5	gi 91228379 ref ZP_01262306.1	Vibrio alginolyticus 12G01	E-value = 1.00E-28	Identity = 39.06%
AB0885	1	gi 152993213 ref YP_001358934.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-85	Identity = 52.03%
	2	gi 86153977 ref ZP_01072179.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 8.00E-76	Identity = 49.01%
	3	gi 57236932 ref YP_178047.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 9.00E-76	Identity = 49.01%
	4	gi 86150541 ref ZP_01068765.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 1.00E-75	Identity = 48.68%
	5	gi 88597641 ref ZP_01100874.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 2.00E-75	Identity = 48.36%
AB0886	1	gi 87119415 ref ZP_01075312.1	Marinomonas sp. MED121	E-value = 2.00E-91	Identity = 32.04%
AB0887	1		<b>*** No matches found ***</b>		
AB0888	1	<i>ftsY</i> gi 152990801 ref YP_001356523.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-90	Identity = 63.16%
	2	gi 154173993 ref YP_001408112.1	Campylobacter curvus 525.92	E-value = 5.00E-89	Identity = 60.28%
	3	gi 157164288 ref YP_001466926.1	Campylobacter concisus 13826	E-value = 2.00E-88	Identity = 59.09%
	4	gi 152992192 ref YP_001357913.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-88	Identity = 58.39%
	5	gi 149194174 ref ZP_01871272.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-85	Identity = 58.95%
AB0889	1	gi 34556527 ref NP_906342.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-40	Identity = 49.40%
	2	gi 15792531 ref NP_282354.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-30	Identity = 42.25%
	3	gi 86150395 ref ZP_01068621.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 3.00E-30	Identity = 42.78%
	4	gi 57238079 ref YP_179328.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-30	Identity = 42.25%
	5	gi 157415470 ref YP_001482726.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-30	Identity = 42.25%
AB0890	1	gi 152992194 ref YP_001357915.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-36	Identity = 46.89%
	2	gi 149194172 ref ZP_01871270.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-32	Identity = 51.14%
	3	gi 78777043 ref YP_393358.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-30	Identity = 47.93%
	4	gi 152990799 ref YP_001356521.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-28	Identity = 39.64%
	5	gi 57242521 ref ZP_00370459.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-23	Identity = 41.88%

AB0891	1	gi 152990798 ref YP_001356520.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-148	Identity = 60.89%
	2	gi 15792533 ref NP_282356.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-145	Identity = 58.61%
	3	gi 86150310 ref ZP_01068536.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 1.00E-144	Identity = 58.73%
	4	gi 57238081 ref YP_179330.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-144	Identity = 58.54%
	5	gi 57242520 ref ZP_00370458.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-144	Identity = 58.03%
AB0892	1	gi 152992772 ref YP_001358493.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-42	Identity = 44.39%
	2	gi 152990742 ref YP_001356464.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-39	Identity = 48.13%
	3	gi 57240934 ref ZP_00368882.1	Campylobacter lari RM2100	E-value = 2.00E-38	Identity = 47.40%
	4	gi 121612964 ref YP_001001110.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-37	Identity = 47.85%
	5	gi 148925633 ref ZP_01809321.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-37	Identity = 47.06%
AB0893	1	gi 152990741 ref YP_001356463.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-81	Identity = 65.77%
	2	gi 78776766 ref YP_393081.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-77	Identity = 63.12%
	3	gi 118580429 ref YP_901679.1	Pelobacter propionicus DSM 2379	E-value = 1.00E-48	Identity = 42.15%
	4	gi 118744146 ref ZP_01592143.1	Geobacter lovleyi SZ	E-value = 6.00E-46	Identity = 43.05%
	5	gi 145619727 ref ZP_01775773.1	Geobacter bemidjiensis Bem	E-value = 1.00E-45	Identity = 41.06%
AB0894	1		*** No matches found ***		
AB0895	1		*** No matches found ***		
AB0896	1		*** No matches found ***		
AB0897	1	gi 126654730 ref ZP_01726264.1	Cyanothece sp. CCY0110	E-value = 2.00E-07	Identity = 33.78%
	2	gi 16329523 ref NP_440251.1	Synechocystis sp. PCC 6803	E-value = 4.00E-07	Identity = 33.78%
	3	gi 17229316 ref NP_485864.1	Nostoc sp. PCC 7120	E-value = 2.00E-06	Identity = 35.14%
AB0898	1	gi 152992763 ref YP_001358484.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-76	Identity = 53.11%
	2	gi 151572635 gb EDN38289.1	Francisella tularensis subsp. novicida GA99-3548	E-value = 4.00E-75	Identity = 56.41%
	3	gi 62261996 gb AAx78036.1	synthetic construct	E-value = 5.00E-75	Identity = 56.04%
	4	gi 89256603 ref YP_513965.1	Francisella tularensis subsp. holarctica	E-value = 4.00E-74	Identity = 56.04%
	5	gi 118498104 ref YP_899154.1	Francisella tularensis subsp. novicida U112	E-value = 4.00E-74	Identity = 56.04%
AB0899	1	gi 152993169 ref YP_001358890.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-72	Identity = 55.73%
	2	gi 78777345 ref YP_393660.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-70	Identity = 53.75%
	3	gi 157165731 ref YP_001466717.1	Campylobacter concisus 13826	E-value = 1.00E-60	Identity = 50.20%
	4	gi 152990599 ref YP_001356321.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-59	Identity = 49.01%
	5	gi 57240928 ref ZP_00368876.1	Campylobacter lari RM2100	E-value = 5.00E-58	Identity = 54.58%
AB0900	1		*** No matches found ***		
AB0901	1	gi 34556468 ref NP_906283.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-83	Identity = 46.77%
	2	gi 121605719 ref YP_983048.1	Polaromonas naphthalenivorans CJ2	E-value = 9.00E-77	Identity = 51.79%
	3	gi 86152084 ref ZP_01070296.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-73	Identity = 44.87%
	4	gi 157415135 ref YP_001482391.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 2.00E-73	Identity = 44.87%
	5	gi 119898960 ref YP_934173.1	Azoarcus sp. BH72	E-value = 4.00E-73	Identity = 47.72%
AB0903	1	gi 34556469 ref NP_906284.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-27	Identity = 32.44%
	2	gi 154173672 ref YP_001408694.1	Campylobacter curvus 525.92	E-value = 1.00E-12	Identity = 27.12%
AB0904	1	gi 34556470 ref NP_906285.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-51	Identity = 50.45%
	2	gi 154174786 ref YP_001408696.1	Campylobacter curvus 525.92	E-value = 6.00E-44	Identity = 43.64%
	3	gi 157164104 ref YP_001467231.1	Campylobacter concisus 13826	E-value = 1.00E-42	Identity = 44.09%
	4	gi 154149275 ref YP_001407283.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-42	Identity = 43.38%
	5	gi 78776459 ref YP_392774.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-39	Identity = 43.58%
AB0905	1	gi 34556471 ref NP_906286.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-64	Identity = 39.79%
	2	gi 152991572 ref YP_001357294.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-53	Identity = 35.81%
	3	gi 78776460 ref YP_392775.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-52	Identity = 35.42%
	4	gi 152992092 ref YP_001357813.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-51	Identity = 32.45%
	5	gi 154174203 ref YP_001408695.1	Campylobacter curvus 525.92	E-value = 1.00E-41	Identity = 36.33%

AB0906	1	gi 157164151 ref YP_001466949.1	Campylobacter concisus 13826	E-value = 4.00E-63	Identity = 45.71%
	2	gi 118474208 ref YP_891522.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-59	Identity = 43.77%
	3	gi 154175132 ref YP_001408092.1	Campylobacter curvus 525.92	E-value = 8.00E-59	Identity = 43.53%
	4	gi 156719903 ref ZP_02061505.1	Hydrogenobaculum sp. Y04AAS1	E-value = 1.00E-48	Identity = 42.09%
	5	gi 118745821 ref ZP_01593785.1	Geobacter lovleyi SZ	E-value = 1.00E-47	Identity = 37.99%
AB0907	1	gi 114799344 ref YP_759497.1	Hyphomonas neptunium ATCC 15444	E-value = 5.00E-22	Identity = 29.83%
	2	gi 87307282 ref ZP_01089427.1	Blastopirellula marina DSM 3645	E-value = 6.00E-21	Identity = 31.07%
	3	gi 87200494 ref YP_497751.1	Novosphingobium aromaticivorans DSM 12444	E-value = 1.00E-20	Identity = 28.15%
AB0908	1	gi 152990733 ref YP_001356455.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-30	Identity = 57.82%
	2	gi 78776931 ref YP_393246.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-26	Identity = 48.30%
	3	gi 152993280 ref YP_001359001.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-26	Identity = 51.02%
	4	gi 34558387 ref NP_908202.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-25	Identity = 52.08%
	5	gi 74318404 ref YP_316144.1	Thiobacillus denitrificans ATCC 25259	E-value = 1.00E-23	Identity = 44.90%
AB0909	1	gi 152992199 ref YP_001357920.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 59.48%
	2	gi 78777466 ref YP_393781.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 58.4%
	3	gi 152990783 ref YP_001356505.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 60.22%
	4	gi 149194563 ref ZP_01871659.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 59.87%
	5	gi 34556688 ref NP_906503.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 58.69%
AB0910	1	gi 157165200 ref YP_001466550.1	Campylobacter concisus 13826	E-value = 8.00E-26	Identity = 40.59%
	2	gi 78777700 ref YP_394015.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-21	Identity = 40.22%
	3	gi 34557920 ref NP_907735.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-20	Identity = 40.68%
	4	gi 86151344 ref ZP_01069559.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-19	Identity = 34.80%
	5	gi 86153694 ref ZP_01071897.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-18	Identity = 34.31%
AB0911	1	gi 15605907 ref NP_213284.1	Aquifex aeolicus VF5	E-value = 2.00E-42	Identity = 46.73%
	2	gi 156719004 ref ZP_02060656.1	Hydrogenobaculum sp. Y04AAS1	E-value = 4.00E-36	Identity = 43.14%
	3	gi 34558330 ref NP_908145.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-30	Identity = 37.63%
	4	gi 126662519 ref ZP_01733518.1	Flavobacteria bacterium BAL38	E-value = 2.00E-17	Identity = 32.99%
	5	gi 153951006 ref YP_001398999.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 5.00E-17	Identity = 32.99%
AB0912	1	gi 91792468 ref YP_562119.1	Shewanella denitrificans OS217	E-value = 1.00E-37	Identity = 37.39%
	2	gi 88797395 ref ZP_01112985.1	Reinekea sp. MED297	E-value = 1.00E-33	Identity = 35.06%
	3	gi 87121429 ref ZP_01077318.1	Marinomonas sp. MED121	E-value = 5.00E-31	Identity = 35.96%
	4	gi 152996390 ref YP_001341225.1	Marinomonas sp. MWYL1	E-value = 6.00E-25	Identity = 34.56%
	5	gi 42522480 ref NP_967860.1	Bdellovibrio bacteriovorus HD100	E-value = 1.00E-21	Identity = 27.51%
AB0913	1	gi 34557182 ref NP_906997.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-114	Identity = 49.19%
	2	gi 78777577 ref YP_393892.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-97	Identity = 50.00%
	3	gi 78355110 ref YP_386559.1	Desulfovibrio desulfuricans G20	E-value = 7.00E-79	Identity = 36.41%
	4	gi 34556672 ref NP_906487.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-77	Identity = 38.30%
	5	gi 154175227 ref YP_001408994.1	Campylobacter curvus 525.92	E-value = 1.00E-74	Identity = 40.27%
AB0914	1		*** No matches found ***		
AB0915	1		*** No matches found ***		
AB0916	1	gi 114332167 ref YP_748389.1	Nitrosomonas eutropha C91	E-value = 0	Identity = 62.81%
	2	gi 149374841 ref ZP_01892614.1	Marinobacter algicola DG893	E-value = 0	Identity = 60.85%
	3	gi 149911249 ref ZP_01899872.1	Moritella sp. PE36	E-value = 0	Identity = 59.36%
	4	gi 114563022 ref YP_750535.1	Shewanella frigidimarina NCIMB 400	E-value = 0	Identity = 59.62%
	5	gi 126668355 ref ZP_01739313.1	Marinobacter sp. ELB17	E-value = 0	Identity = 61.25%
AB0917	1	gi 91794373 ref YP_564024.1	Shewanella denitrificans OS217	E-value = 2.00E-38	Identity = 68.14%
	2	gi 95930121 ref ZP_01312860.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-34	Identity = 66.36%
	3	gi 95930113 ref ZP_01312852.1	Desulfuromonas acetoxidans DSM 684	E-value = 4.00E-33	Identity = 61.82%
	4	gi 113938812 ref ZP_01424675.1	Herpetosiphon aurantiacus ATCC 23779	E-value = 8.00E-33	Identity = 56.64%

	5	gi 15612940 ref NP_241243.1	Bacillus halodurans C-125	E-value = 1.00E-30	Identity = 56.88%
AB0918	1		*** No matches found ***		
AB0919	1		*** No matches found ***		
AB0920	1		*** No matches found ***		
AB0921	1	<i>guaA</i> gi 152993480 ref YP_001359201.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 77%
	2	gi 34557924 ref NP_907739.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 74.07%
	3	gi 57238122 ref YP_179372.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 0	Identity = 71.68%
	4	gi 57168146 ref ZP_00367285.1	Campylobacter coli RM2228	E-value = 0	Identity = 71.29%
	5	gi 148926245 ref ZP_01809930.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 0	Identity = 71.48%
AB0922	1	<i>nadB</i> gi 152991084 ref YP_001356806.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-146	Identity = 53.96%
	2	gi 34557925 ref NP_907740.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-140	Identity = 51.67%
	3	gi 152993482 ref YP_001359203.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-137	Identity = 50.83%
	4	gi 78776621 ref YP_392936.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-135	Identity = 52.25%
	5	gi 32265516 ref NP_859548.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-130	Identity = 50.52%
AB0923	1	gi 152993483 ref YP_001359204.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-13	Identity = 34.25%
	2	gi 34557926 ref NP_907741.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-10	Identity = 32.09%
	3	gi 78776620 ref YP_392935.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-08	Identity = 33.56%
	4	gi 154174897 ref YP_001407805.1	Campylobacter curvus 525.92	E-value = 2.00E-07	Identity = 30.56%
AB0924	1	gi 57639937 ref YP_182415.1	Thermococcus kodakarensis KOD1	E-value = 7.00E-19	Identity = 30.96%
	2	gi 149194442 ref ZP_01871539.1	Caminiabacter mediatlanticus TB-2	E-value = 1.00E-17	Identity = 39.29%
	3	gi 21310089 gb AAM46140.1 AF380136_1	Helicobacter pylori	E-value = 3.00E-17	Identity = 34.19%
	4	gi 108563216 ref YP_627532.1	Helicobacter pylori HPAG1	E-value = 3.00E-17	Identity = 33.55%
	5	gi 15611809 ref NP_223460.1	Helicobacter pylori J99	E-value = 8.00E-17	Identity = 34.19%
AB0925	1	<i>aspB3</i> gi 152990562 ref YP_001356284.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-142	Identity = 65.80%
	2	gi 78777332 ref YP_393647.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-141	Identity = 67.36%
	3	gi 152992951 ref YP_001358672.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-139	Identity = 65.19%
	4	gi 57167758 ref ZP_00366898.1	Campylobacter coli RM2228	E-value = 1.00E-131	Identity = 62.34%
	5	gi 86152185 ref ZP_01070397.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 7.00E-131	Identity = 63.12%
AB0926	1	gi 34557976 ref NP_907791.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-77	Identity = 57.14%
	2	gi 152990797 ref YP_001356519.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-74	Identity = 56.45%
	3	gi 152993476 ref YP_001359197.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-72	Identity = 52.92%
	4	gi 78777045 ref YP_393360.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-69	Identity = 53.95%
	5	gi 157415211 ref YP_001482467.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-64	Identity = 47.95%
AB0927	1	gi 78777128 ref YP_393443.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-161	Identity = 42.75%
AB0928	1	<i>cyaA</i> gi 78777127 ref YP_393442.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 48.66%
	2	gi 34557949 ref NP_907764.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-175	Identity = 44.73%
	3	gi 152993438 ref YP_001359159.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-156	Identity = 43.12%
	4	gi 94266538 ref ZP_01290225.1	delta proteobacterium MLMS-1	E-value = 1.00E-125	Identity = 36.51%
	5	gi 94264878 ref ZP_01288652.1	delta proteobacterium MLMS-1	E-value = 6.00E-125	Identity = 36.68%
AB0929	1	gi 34557948 ref NP_907763.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-23	Identity = 25.35%
	2	gi 94265133 ref ZP_01288897.1	delta proteobacterium MLMS-1	E-value = 7.00E-23	Identity = 28.28%
	3	gi 94264704 ref ZP_01288485.1	delta proteobacterium MLMS-1	E-value = 2.00E-21	Identity = 27.38%
AB0930	1		*** No matches found ***		
AB0931	1		*** No matches found ***		
AB0932	1	gi 78777412 ref YP_393727.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-78	Identity = 50.66%
	2	gi 90412161 ref ZP_01220167.1	Photobacterium profundum 3TCK	E-value = 4.00E-67	Identity = 42.81%
	3	gi 84391791 ref ZP_00991693.1	Vibrio splendidus 12B01	E-value = 9.00E-67	Identity = 43.05%
	4	gi 90581197 ref ZP_01236995.1	Vibrio angustum S14	E-value = 1.00E-66	Identity = 43.60%
	5	gi 116184950 ref ZP_01474871.1	Vibrio sp. Ex25	E-value = 2.00E-66	Identity = 43.77%



AB0933	1	gi 15615091 ref NP_243394.1	Bacillus halodurans C-125	E-value = 1.00E-127	Identity = 63.11%
	2	gi 56418997 ref YP_146315.1	Geobacillus kaustophilus HTA426	E-value = 3.00E-119	Identity = 60.49%
	3	gi 52082204 ref YP_080995.1	Bacillus licheniformis ATCC 14580	E-value = 3.00E-118	Identity = 59.17%
	4	gi 89097967 ref ZP_01170854.1	Bacillus sp. NRRL B-14911	E-value = 3.00E-116	Identity = 61.31%
	5	gi 138894141 ref YP_001124594.1	Geobacillus thermodenitrificans NG80-2	E-value = 3.00E-116	Identity = 59.75%
AB0934	1	gi 34557061 ref NP_906876.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-59	Identity = 51.52%
	2	gi 154174730 ref YP_001408961.1	Campylobacter curvus 525.92	E-value = 3.00E-59	Identity = 47.33%
	3	gi 118475653 ref YP_891375.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-58	Identity = 49.37%
	4	gi 154147896 ref YP_001406133.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-57	Identity = 47.54%
	5	gi 68553688 ref ZP_00593054.1	Prosthecochloris aestuarii DSM 271	E-value = 2.00E-56	Identity = 48.12%
AB0935	1	gi 121543259 ref ZP_01674947.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 7.00E-25	Identity = 39.70%
	2	gi 51244612 ref YP_064496.1	Desulfotalea psychrophila LSv54	E-value = 4.00E-23	Identity = 37.56%
	3	gi 154148148 ref YP_001406131.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-22	Identity = 43.15%
	4	gi 94987305 ref YP_595238.1	Lawsonia intracellularis PHE/MN1-00	E-value = 3.00E-22	Identity = 37.31%
	5	gi 83594829 ref YP_428581.1	Rhodospirillum rubrum ATCC 11170	E-value = 6.00E-21	Identity = 36.55%
AB0936	1		<b>*** No matches found ***</b>		
AB0938	1	gi 118475061 ref YP_891378.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-19	Identity = 35.68%
	2	gi 154175425 ref YP_001408958.1	Campylobacter curvus 525.92	E-value = 6.00E-17	Identity = 32.18%
	3	gi 154148342 ref YP_001406129.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-16	Identity = 35.71%
AB0939	1	gi 154175272 ref YP_001408957.1	Campylobacter curvus 525.92	E-value = 1.00E-55	Identity = 53.05%
	2	gi 118474444 ref YP_891379.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-52	Identity = 50.23%
	3	gi 154149357 ref YP_001406128.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-52	Identity = 49.77%
	4	gi 126738176 ref ZP_01753897.1	Roseobacter sp. SK209-2-6	E-value = 2.00E-38	Identity = 39.41%
	5	gi 157375233 ref YP_001473833.1	Shewanella sediminis HAW-EB3	E-value = 7.00E-36	Identity = 38.10%
AB0940	1	gi 157372636 ref YP_001480625.1	Serratia proteamaculans 568	E-value = 1.00E-52	Identity = 32.93%
	2	gi 77978573 ref ZP_00834000.1	Yersinia intermedia ATCC 29909	E-value = 7.00E-50	Identity = 29.64%
	3	gi 146309719 ref YP_001174793.1	Enterobacter sp. 638	E-value = 4.00E-48	Identity = 29.27%
	4	gi 50121044 ref YP_050211.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 5.00E-47	Identity = 28.30%
	5	gi 15597659 ref NP_251153.1	Pseudomonas aeruginosa PAO1	E-value = 2.00E-45	Identity = 27.02%
AB0941	1		<b>*** No matches found ***</b>		
AB0942	1		<b>*** No matches found ***</b>		
AB0943	1		<b>*** No matches found ***</b>		
AB0944	1		<b>*** No matches found ***</b>		
AB0945	1		<b>*** No matches found ***</b>		
AB0946	1		<b>*** No matches found ***</b>		
AB0947	1		<b>*** No matches found ***</b>		
AB0948	1	gi 78066185 ref YP_368954.1	Burkholderia sp. 383	E-value = 3.00E-11	Identity = 26.79%
AB0949	1		<b>*** No matches found ***</b>		
AB0950	1	gi 126734333 ref ZP_01750080.1	Roseobacter sp. CCS2	E-value = 1.00E-07	Identity = 29.70%
	2	gi 89056233 ref YP_511684.1	Jannaschia sp. CCS1	E-value = 9.00E-07	Identity = 25.00%
AB0951	1	gi 119945466 ref YP_943146.1	Psychromonas ingrahamii 37	E-value = 4.00E-24	Identity = 32.23%
	2	gi 121583243 ref YP_973679.1	Polaromonas naphthalenivorans CJ2	E-value = 5.00E-21	Identity = 30.21%
	3	gi 77164826 ref YP_343351.1	Nitrosococcus oceani ATCC 19707	E-value = 1.00E-16	Identity = 27.78%
	4	gi 92114915 ref YP_574843.1	Chromohalobacter salexigens DSM 3043	E-value = 2.00E-14	Identity = 28.45%
	5	gi 153872680 ref ZP_02001500.1	Beggiatoa sp. PS	E-value = 5.00E-10	Identity = 26.27%
AB0953	1	gi 154174361 ref YP_001408609.1	Campylobacter curvus 525.92	E-value = 1.00E-51	Identity = 49.77%
	2	gi 125718980 ref YP_001036113.1	Streptococcus sanguinis SK36	E-value = 8.00E-50	Identity = 50.68%
	3	gi 42526038 ref NP_971136.1	Treponema denticola ATCC 35405	E-value = 2.00E-39	Identity = 42.79%
	4	gi 149173397 ref ZP_01852027.1	Planctomyces maris DSM 8797	E-value = 1.00E-37	Identity = 41.52%

	5	gi 116249363 ref YP_765204.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 5.00E-34	Identity = 39.19%
AB0954	1	gi 78777366 ref YP_393681.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-48	Identity = 36.93%
AB0955	1	gi 118590999 ref ZP_01548399.1	Stappia aggregata IAM 12614	E-value = 2.00E-44	Identity = 33.23%
	2	gi 52842249 ref YP_096048.1	Legionella pneumophila subsp. pneumophila str. Philadelphia 1	E-value = 6.00E-44	Identity = 34.26%
	3	gi 148359604 ref YP_001250811.1	Legionella pneumophila str. Corby	E-value = 8.00E-44	Identity = 34.26%
	4	gi 54294930 ref YP_127345.1	Legionella pneumophila str. Lens	E-value = 1.00E-43	Identity = 34.26%
	5	gi 113931933 ref ZP_01417835.1	Caulobacter sp. K31	E-value = 9.00E-43	Identity = 31.69%
AB0956	1		*** No matches found ***		
AB0957	1		*** No matches found ***		
AB0958	1	gi 157165103 ref YP_001466306.1	Campylobacter concisus 13826	E-value = 0	Identity = 51.73%
	2	gi 154174490 ref YP_001408849.1	Campylobacter curvus 525.92	E-value = 0	Identity = 50.96%
	3	gi 154148573 ref YP_001407040.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 46.61%
	4	gi 32474356 ref NP_867350.1	Rhodopirellula baltica SH 1	E-value = 0	Identity = 40.81%
	5	gi 152991630 ref YP_001357351.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-177	Identity = 44.32%
AB0959	1		*** No matches found ***		
AB0960	1	<i>uvrA</i> gi 152990935 ref YP_001356657.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 73.69%
	2	gi 152992905 ref YP_001358626.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 74.04%
	3	gi 154174446 ref YP_001408842.1	Campylobacter curvus 525.92	E-value = 0	Identity = 72.97%
	4	gi 78777361 ref YP_393676.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 75.05%
	5	gi 57168481 ref ZP_00367615.1	Campylobacter coli RM2228	E-value = 0	Identity = 73.11%
AB0961	1	gi 78223485 ref YP_385232.1	Geobacter metallireducens GS-15	E-value = 1.00E-29	Identity = 38.46%
	2	gi 76803928 gb ABA55871.1	Vibrio sp. DAT722	E-value = 2.00E-13	Identity = 31.03%
AB0962	1	gi 78777849 ref YP_394164.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-41	Identity = 66.13%
	2	gi 152993485 ref YP_001359206.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-27	Identity = 47.15%
	3	gi 89094324 ref ZP_01167265.1	Oceanospirillum sp. MED92	E-value = 9.00E-27	Identity = 50.86%
	4	gi 154174054 ref YP_001408339.1	Campylobacter curvus 525.92	E-value = 4.00E-26	Identity = 46.27%
	5	gi 86151085 ref ZP_01069301.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-25	Identity = 44.27%
AB0963	1	<i>ggt</i> gi 50083726 ref YP_045236.1	Acinetobacter sp. ADP1	E-value = 0	Identity = 86.79%
	2	gi 152981219 ref YP_001352291.1	Janthinobacterium sp. Marseille	E-value = 0	Identity = 65.20%
	3	gi 16080663 ref NP_391491.1	Bacillus subtilis subsp. subtilis str. 168	E-value = 4.00E-131	Identity = 45.91%
	4	gi 76801570 ref YP_326578.1	Natronomonas pharaonis DSM 2160	E-value = 7.00E-130	Identity = 46.34%
	5	gi 154687727 ref YP_001422888.1	Bacillus amyloliquefaciens FZB42	E-value = 5.00E-125	Identity = 44.81%
AB0964	1	gi 152990936 ref YP_001356658.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-27	Identity = 43.43%
	2	gi 157165283 ref YP_001466468.1	Campylobacter concisus 13826	E-value = 8.00E-27	Identity = 40.20%
	3	gi 154175043 ref YP_001408863.1	Campylobacter curvus 525.92	E-value = 1.00E-24	Identity = 39.29%
	4	gi 34557943 ref NP_907758.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-24	Identity = 38.89%
	5	gi 149194015 ref ZP_01871113.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-24	Identity = 40.50%
AB0966	1	<i>cysE</i> gi 152990563 ref YP_001356285.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-73	Identity = 59.83%
	2	gi 154148205 ref YP_001406488.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-72	Identity = 59.13%
	3	gi 78777331 ref YP_393646.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-71	Identity = 56.84%
	4	gi 152992950 ref YP_001358671.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-71	Identity = 57.76%
	5	gi 32266733 ref NP_860765.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-70	Identity = 58.19%
AB0967	1	<i>speA</i> gi 152990564 ref YP_001356286.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 63.17%
	2	gi 152992949 ref YP_001358670.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 59.32%
	3	gi 118474532 ref YP_892067.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 59.64%
	4	gi 57167760 ref ZP_00366900.1	Campylobacter coli RM2228	E-value = 0	Identity = 60.23%
	5	gi 57241218 ref ZP_00369165.1	Campylobacter lari RM2100	E-value = 0	Identity = 59.8%
AB0968	1	<i>hisS</i> gi 78777328 ref YP_393643.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-149	Identity = 63.84%
	2	gi 152992944 ref YP_001358665.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-144	Identity = 61.60%

	3	gi 152990565 ref YP_001356287.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-132	Identity = 57.46%
	4	gi 149194438 ref ZP_01871535.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-130	Identity = 60.93%
	5	gi 118474445 ref YP_892066.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-129	Identity = 57.71%
AB0969	1	<i>tmk</i> gi 34557029 ref NP_906844.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-50	Identity = 56.74%
	2	gi 152992943 ref YP_001358664.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-42	Identity = 49.21%
	3	gi 149193824 ref ZP_01870922.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-40	Identity = 55.87%
	4	gi 78777324 ref YP_393639.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-40	Identity = 52.88%
	5	gi 152990566 ref YP_001356288.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-39	Identity = 50.79%
AB0970	1	<i>coaD</i> gi 157165743 ref YP_001466857.1	Campylobacter concisus 13826	E-value = 5.00E-49	Identity = 61.33%
	2	gi 57167763 ref ZP_00366903.1	Campylobacter coli RM2228	E-value = 2.00E-46	Identity = 60.96%
	3	gi 154174638 ref YP_001408261.1	Campylobacter curvus 525.92	E-value = 3.00E-46	Identity = 60.14%
	4	gi 15792105 ref NP_281928.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-45	Identity = 59.59%
	5	gi 32266860 ref NP_860892.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-45	Identity = 62.24%
AB0971	1	<i>ubiD</i> gi 78777322 ref YP_393637.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-49	Identity = 53.55%
	2	gi 34557027 ref NP_906842.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-47	Identity = 52.46%
	3	gi 152992941 ref YP_001358662.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-46	Identity = 51.63%
	4	gi 157165444 ref YP_001466856.1	Campylobacter concisus 13826	E-value = 2.00E-45	Identity = 51.91%
	5	gi 152990568 ref YP_001356290.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-45	Identity = 50.27%
AB0972	1	gi 24376378 ref NP_720486.1	Shewanella oneidensis MR-1	E-value = 1.00E-17	Identity = 31.72%
	2	gi 149197831 ref ZP_01874880.1	Lentisphaera araneosa HTCC2155	E-value = 7.00E-17	Identity = 32.42%
	3	gi 110601859 ref ZP_01390024.1	Geobacter sp. FRC-32	E-value = 4.00E-16	Identity = 29.76%
	4	gi 34558220 ref NP_908035.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-15	Identity = 32.21%
	5	gi 149196761 ref ZP_01873814.1	Lentisphaera araneosa HTCC2155	E-value = 4.00E-15	Identity = 30.77%
AB0973	1	<i>rplI</i> gi 34557658 ref NP_907473.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-30	Identity = 57.24%
	2	gi 152990744 ref YP_001356466.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-29	Identity = 60.81%
	3	gi 157164966 ref YP_001466811.1	Campylobacter concisus 13826	E-value = 2.00E-28	Identity = 54.05%
	4	gi 78777572 ref YP_393887.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-28	Identity = 52.70%
	5	gi 154175047 ref YP_001408327.1	Campylobacter curvus 525.92	E-value = 4.00E-27	Identity = 53.69%
AB0974	1	<i>hslV</i> gi 78777573 ref YP_393888.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-75	Identity = 85.31%
	2	gi 152990745 ref YP_001356467.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-70	Identity = 81.46%
	3	gi 86151772 ref ZP_01069986.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-69	Identity = 77.53%
	4	gi 57167684 ref ZP_00366824.1	Campylobacter coli RM2228	E-value = 5.00E-69	Identity = 76.97%
	5	gi 15792018 ref NP_281841.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-69	Identity = 76.97%
AB0975	1	<i>hslU</i> gi 78777574 ref YP_393889.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-144	Identity = 65.46%
	2	gi 34557656 ref NP_907471.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-143	Identity = 67.12%
	3	gi 157165582 ref YP_001466813.1	Campylobacter concisus 13826	E-value = 2.00E-141	Identity = 65.91%
	4	gi 152990746 ref YP_001356468.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-140	Identity = 65.77%
	5	gi 32265808 ref NP_859840.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-138	Identity = 62.22%
AB0976	1		<b>*** No matches found ***</b>		
AB0977	1	gi 152992820 ref YP_001358541.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-74	Identity = 67.15%
	2	gi 78777281 ref YP_393596.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-68	Identity = 63.29%
	3	gi 154174378 ref YP_001407901.1	Campylobacter curvus 525.92	E-value = 7.00E-68	Identity = 59.62%
	4	gi 157414923 ref YP_001482179.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 1.00E-67	Identity = 61.54%
	5	gi 86153267 ref ZP_01071471.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-67	Identity = 61.54%
AB0978	1	gi 34558356 ref NP_908171.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-36	Identity = 28.76%
	2	gi 152990522 ref YP_001356244.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-34	Identity = 31.59%
	3	gi 78777280 ref YP_393595.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-33	Identity = 30.33%
	4	gi 57167671 ref ZP_00366811.1	Campylobacter coli RM2228	E-value = 2.00E-31	Identity = 28.04%
	5	gi 15792005 ref NP_281828.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-28	Identity = 27.80%

AB0979	1	<i>rhpA</i>	gi 32266823 ref NP_860855.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-56	Identity = 44.48%
			gi 152992818 ref YP_001358539.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-54	Identity = 42.26%
			gi 15646178 ref NP_208362.1	Helicobacter pylori 26695	E-value = 4.00E-51	Identity = 44.80%
			gi 108563945 ref YP_628261.1	Helicobacter pylori HPAG1	E-value = 8.00E-51	Identity = 45.80%
			gi 154175501 ref YP_001407903.1	Campylobacter curvus 525.92	E-value = 7.00E-50	Identity = 41.97%
AB0980	1	<i>hisB</i>	gi 152992817 ref YP_001358538.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-69	Identity = 66.84%
			gi 118475282 ref YP_892347.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-67	Identity = 65.26%
			gi 152990524 ref YP_001356246.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-66	Identity = 61.05%
			gi 154149199 ref YP_001405905.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-65	Identity = 63.68%
			gi 34558354 ref NP_908169.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-65	Identity = 58.95%
AB0981	1		gi 152992816 ref YP_001358537.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-48	Identity = 61.35%
			gi 152990525 ref YP_001356247.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-44	Identity = 56.10%
			gi 149194643 ref ZP_01871739.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-42	Identity = 57.32%
			gi 34558353 ref NP_908168.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-41	Identity = 56.36%
			gi 78777277 ref YP_393592.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-39	Identity = 51.57%
AB0982	1		<b>*** No matches found ***</b>			
AB0983	1		gi 157165382 ref YP_001467170.1	Campylobacter concisus 13826	E-value = 7.00E-23	Identity = 46.94%
			gi 154174256 ref YP_001407907.1	Campylobacter curvus 525.92	E-value = 1.00E-22	Identity = 45.39%
			gi 57242608 ref ZP_00370545.1	Campylobacter upsaliensis RM3195	E-value = 7.00E-22	Identity = 39.61%
			gi 57167675 ref ZP_00366815.1	Campylobacter coli RM2228	E-value = 7.00E-19	Identity = 42.22%
			gi 118474366 ref YP_892344.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-18	Identity = 37.33%
AB0984	1		gi 152990528 ref YP_001356250.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-52	Identity = 52.55%
			gi 152992813 ref YP_001358534.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-50	Identity = 53.81%
			gi 78777274 ref YP_393589.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-49	Identity = 53.72%
			gi 149194640 ref ZP_01871736.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-48	Identity = 56.19%
			gi 34558350 ref NP_908165.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-48	Identity = 47.24%
AB0985	1		gi 152990529 ref YP_001356251.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-41	Identity = 53.95%
			gi 154148667 ref YP_001405910.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-40	Identity = 52.32%
			gi 118475358 ref YP_892342.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-39	Identity = 52.70%
			gi 152992812 ref YP_001358533.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-38	Identity = 55.03%
			gi 78777273 ref YP_393588.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-38	Identity = 52.00%
AB0986	1		gi 34557006 ref NP_906821.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-16	Identity = 32.91%
			gi 30248569 ref NP_840639.1	Nitrosomonas europaea ATCC 19718	E-value = 8.00E-15	Identity = 31.61%
			gi 34557770 ref NP_907585.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-13	Identity = 33.33%
			gi 83592774 ref YP_426526.1	Rhodospirillum rubrum ATCC 11170	E-value = 2.00E-12	Identity = 30.52%
			gi 30249178 ref NP_841248.1	Nitrosomonas europaea ATCC 19718	E-value = 3.00E-12	Identity = 29.80%
AB0987	1		gi 34557007 ref NP_906822.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-35	Identity = 30.06%
			gi 34557769 ref NP_907584.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-23	Identity = 25.73%
			gi 70730270 ref YP_260009.1	Pseudomonas fluorescens Pf-5	E-value = 1.00E-18	Identity = 25.31%
			gi 90021090 ref YP_526917.1	Saccharophagus degradans 2-40	E-value = 1.00E-14	Identity = 25.62%
			gi 71280943 ref YP_267011.1	Colwellia psychrerythraea 34H	E-value = 8.00E-14	Identity = 26.42%
AB0988	1		gi 28871270 ref NP_793889.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 7.00E-121	Identity = 36.17%
			gi 66047091 ref YP_236932.1	Pseudomonas syringae pv. syringae B728a	E-value = 5.00E-119	Identity = 36.29%
			gi 152982618 ref YP_001352446.1	Janthinobacterium sp. Marseille	E-value = 2.00E-115	Identity = 34.30%
			gi 30248820 ref NP_840890.1	Nitrosomonas europaea ATCC 19718	E-value = 2.00E-109	Identity = 34.38%
			gi 30248981 ref NP_841051.1	Nitrosomonas europaea ATCC 19718	E-value = 6.00E-109	Identity = 35.43%
AB0989	1	<i>argC</i>	gi 124871586 gb EAY63302.1	Burkholderia cenocepacia PC184	E-value = 7.00E-90	Identity = 50.31%
			gi 84356216 ref ZP_00981072.1	Burkholderia cenocepacia PC184	E-value = 7.00E-90	Identity = 50.31%
			gi 107024336 ref YP_622663.1	Burkholderia cenocepacia AU 1054	E-value = 1.00E-89	Identity = 50.31%

	4	gi 116688338 ref YP_833961.1	Burkholderia cenocepacia HI2424	E-value = 1.00E-89	Identity = 50.31%
	5	gi 134294409 ref YP_001118144.1	Burkholderia vietnamiensis G4	E-value = 1.00E-89	Identity = 50.31%
AB0990	1	gi 152992516 ref YP_001358237.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-113	Identity = 45.00%
	2	gi 149194355 ref ZP_01871452.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-95	Identity = 43.70%
	3	gi 145620794 ref ZP_01776811.1	Geobacter bemidjensis Bem	E-value = 7.00E-87	Identity = 37.93%
	4	gi 145617707 ref ZP_01773771.1	Geobacter bemidjensis Bem	E-value = 9.00E-86	Identity = 38.95%
	5	gi 95930308 ref ZP_01313045.1	Desulfuromonas acetoxidans DSM 684	E-value = 3.00E-85	Identity = 37.79%
AB0991	1	gi 78223846 ref YP_385593.1	Geobacter metallireducens GS-15	E-value = 1.00E-21	Identity = 38.98%
	2	gi 91203156 emb CAJ72795.1	Candidatus Kuenenia stuttgartiensis	E-value = 7.00E-21	Identity = 40.68%
	3	gi 73535416 pdb 1WLI A	Desulfovibrio vulgaris	E-value = 5.00E-20	Identity = 41.23%
	4	gi 145620795 ref ZP_01776812.1	Geobacter bemidjensis Bem	E-value = 2.00E-18	Identity = 35%
	5	gi 119356604 ref YP_911248.1	Chlorobium phaeobacteroides DSM 266	E-value = 2.00E-17	Identity = 37.29%
AB0992	1	gi 34556834 ref NP_906649.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-39	Identity = 43.88%
	2	gi 152992543 ref YP_001358264.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-35	Identity = 41.67%
	3	gi 152992517 ref YP_001358238.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-30	Identity = 38.54%
	4	gi 32266973 ref NP_861005.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-24	Identity = 38.04%
	5	gi 154242519 ref ZP_02024081.1	Candidatus Nitrosopumilus maritimus SCM1	E-value = 1.00E-19	Identity = 34.03%
AB0993	1	gi 152990417 ref YP_001356139.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-134	Identity = 47.99%
	2	gi 78777074 ref YP_393389.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-131	Identity = 48.72%
	3	gi 152992151 ref YP_001357872.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-123	Identity = 49.45%
	4	gi 152993097 ref YP_001358818.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-118	Identity = 43.99%
	5	gi 124547499 ref ZP_01706384.1	Shewanella putrefaciens 200	E-value = 1.00E-50	Identity = 29.13%
AB0994	1	gi 78777075 ref YP_393390.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-142	Identity = 55.17%
	2	gi 152992150 ref YP_001357871.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-141	Identity = 50.49%
	3	gi 152990416 ref YP_001356138.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-140	Identity = 51.17%
	4	gi 152993098 ref YP_001358819.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-130	Identity = 48.89%
	5	gi 124547500 ref ZP_01706385.1	Shewanella putrefaciens 200	E-value = 2.00E-33	Identity = 28.19%
AB0995	1	gi 152990415 ref YP_001356137.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-44	Identity = 42.21%
	2	gi 152992149 ref YP_001357870.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-39	Identity = 41.67%
	3	gi 78777076 ref YP_393391.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-39	Identity = 41.06%
	4	gi 34558839 gb AAQ75183.1	Alvinella pompejana epibiont 7G3	E-value = 8.00E-33	Identity = 37.64%
	5	gi 152993096 ref YP_001358817.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-30	Identity = 34.36%
AB0996	1	gi 149195340 ref ZP_01872427.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-74	Identity = 41.11%
	2	gi 78777077 ref YP_393392.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-31	Identity = 28.27%
	3	gi 152990414 ref YP_001356136.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-27	Identity = 25.74%
	4	gi 152992148 ref YP_001357869.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-22	Identity = 25.74%
	5	gi 126662106 ref ZP_01733105.1	Flavobacteria bacterium BAL38	E-value = 3.00E-12	Identity = 25.24%
AB0997	1		*** No matches found ***		
AB0998	1	<i>fliP</i> gi 118474799 ref YP_891929.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-64	Identity = 59.41%
	2	gi 57167820 ref ZP_00366960.1	Campylobacter coli RM2228	E-value = 3.00E-63	Identity = 59.59%
	3	gi 66735095 gb AAV53788.1	Campylobacter jejuni	E-value = 4.00E-63	Identity = 60.87%
	4	gi 57242347 ref ZP_00370286.1	Campylobacter upsaliensis RM3195	E-value = 9.00E-63	Identity = 58.26%
	5	gi 86152107 ref ZP_01070319.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-62	Identity = 61.23%
AB0999	1	<i>pbpC</i> gi 152990531 ref YP_001356253.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-172	Identity = 51.76%
	2	gi 78777271 ref YP_393586.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-166	Identity = 50.67%
	3	gi 154174019 ref YP_001407911.1	Campylobacter curvus 525.92	E-value = 8.00E-164	Identity = 49.42%
	4	gi 157164806 ref YP_001467167.1	Campylobacter concisus 13826	E-value = 4.00E-163	Identity = 48.34%
	5	gi 57241131 ref ZP_00369078.1	Campylobacter lari RM2100	E-value = 3.00E-162	Identity = 48.91%
AB1000	1		*** No matches found ***		

AB1001	1	gi 154173726 ref YP_001407888.1	Campylobacter curvus 525.92	E-value = 4.00E-47	Identity = 33.82%
	2	gi 157165489 ref YP_001467343.1	Campylobacter concisus 13826	E-value = 3.00E-46	Identity = 33.80%
	3	gi 78776987 ref YP_393302.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-46	Identity = 33.41%
	4	gi 34556596 ref NP_906411.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-45	Identity = 30.71%
	5	gi 32266287 ref NP_860319.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-43	Identity = 30.47%
AB1002	1	ftsX gi 57167611 ref ZP_00366751.1	Campylobacter coli RM2228	E-value = 6.00E-26	Identity = 30.71%
	2	gi 57238148 ref YP_179398.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-22	Identity = 29.21%
	3	gi 86152534 ref ZP_01070739.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-22	Identity = 29.21%
	4	gi 15792600 ref NP_282423.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-22	Identity = 29.21%
	5	gi 157164680 ref YP_001467344.1	Campylobacter concisus 13826	E-value = 4.00E-22	Identity = 28.10%
AB1003	1	ftsE gi 34556594 ref NP_906409.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-74	Identity = 60.45%
	2	gi 32266285 ref NP_860317.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-66	Identity = 59.11%
	3	gi 78776985 ref YP_393300.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-66	Identity = 57.53%
	4	gi 152990502 ref YP_001356224.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-63	Identity = 55.45%
	5	gi 57167610 ref ZP_00366750.1	Campylobacter coli RM2228	E-value = 6.00E-63	Identity = 54.79%
AB1004	1	gi 152990501 ref YP_001356223.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-87	Identity = 44.33%
	2	gi 78776984 ref YP_393299.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-83	Identity = 45.73%
	3	gi 152993334 ref YP_001359055.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-80	Identity = 45.00%
	4	gi 34556593 ref NP_906408.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-75	Identity = 41.75%
	5	gi 118475337 ref YP_892376.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-64	Identity = 40.40%
AB1005	1	gi 152990500 ref YP_001356222.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-78	Identity = 40.93%
	2	gi 118474336 ref YP_892377.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-66	Identity = 38.56%
	3	gi 34556592 ref NP_906407.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-65	Identity = 36.34%
	4	gi 157415543 ref YP_001482799.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-58	Identity = 35.15%
	5	gi 121613534 ref YP_001000955.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 3.00E-58	Identity = 35.15%
AB1006	1	riuD gi 152990499 ref YP_001356221.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-95	Identity = 60.44%
	2	gi 152993336 ref YP_001359057.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-86	Identity = 55.59%
	3	gi 78776982 ref YP_393297.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-85	Identity = 53.25%
	4	gi 34556591 ref NP_906406.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-80	Identity = 52.01%
	5	gi 118475501 ref YP_892378.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-79	Identity = 54.06%
AB1007	1	mrdB gi 154174319 ref YP_001407892.1	Campylobacter curvus 525.92	E-value = 1.00E-101	Identity = 58.06%
	2	gi 118475772 ref YP_892379.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-101	Identity = 58.36%
	3	gi 152990498 ref YP_001356220.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-99	Identity = 58.61%
	4	gi 57238153 ref YP_179403.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-98	Identity = 59.05%
	5	gi 86150838 ref ZP_01069054.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-98	Identity = 59.05%
AB1008	1	gi 78777308 ref YP_393623.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-14	Identity = 30.77%
	2	gi 57505503 ref ZP_00371431.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-06	Identity = 27.57%
AB1009	1	hemL gi 152990470 ref YP_001356192.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-171	Identity = 67.61%
	2	gi 152992844 ref YP_001358565.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-170	Identity = 69.48%
	3	gi 78777307 ref YP_393622.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-164	Identity = 67.54%
	4	gi 149193936 ref ZP_01871034.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-156	Identity = 63.40%
	5	gi 34558181 ref NP_907996.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-153	Identity = 60.76%
AB1010	1	gi 126699264 ref YP_001088161.1	Clostridium difficile 630	E-value = 1.00E-27	Identity = 59.22%
	2	gi 77918942 ref YP_356757.1	Pelobacter carbinolicus DSM 2380	E-value = 1.00E-27	Identity = 58.65%
	3	gi 88859639 ref ZP_01134279.1	Pseudoalteromonas tunicata D2	E-value = 5.00E-27	Identity = 59.62%
	4	gi 78485875 ref YP_391800.1	Thiomicrospira crunogena XCL-2	E-value = 6.00E-27	Identity = 56.31%
	5	gi 110601129 ref ZP_01389329.1	Geobacter sp. FRC-32	E-value = 7.00E-27	Identity = 60.19%
AB1011	1	gi 109947556 ref YP_664784.1	Helicobacter acinonychis str. Sheeba	E-value = 4.00E-19	Identity = 54.12%
	2	gi 152992836 ref YP_001358557.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-18	Identity = 51.11%

	3	gi 15611361 ref NP_223012.1	Helicobacter pylori J99	E-value = 3.00E-18	Identity = 54.12%
	4	gi 15644935 ref NP_207105.1	Helicobacter pylori 26695	E-value = 6.00E-18	Identity = 54.88%
	5	gi 152990471 ref YP_001356193.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-18	Identity = 52.63%
AB1012	1	gi 152990472 ref YP_001356194.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-16	Identity = 34.10%
	2	gi 154175390 ref YP_001407948.1	Campylobacter curvus 525.92	E-value = 2.00E-12	Identity = 30.77%
	3	gi 149193738 ref ZP_01870836.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-11	Identity = 35.23%
	4	gi 152992835 ref YP_001358556.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-10	Identity = 30.99%
AB1013	1	gi 78777304 ref YP_393619.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-34	Identity = 39.74%
	2	gi 34558184 ref NP_907999.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-29	Identity = 31.28%
	3	gi 152993223 ref YP_001358944.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-25	Identity = 34.07%
	4	gi 152990240 ref YP_001355962.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-23	Identity = 33.04%
	5	gi 149195053 ref ZP_01872145.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-17	Identity = 32.59%
AB1014	1	gi 78777303 ref YP_393618.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 66.77%
	2	gi 118475308 ref YP_891711.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 69.33%
	3	gi 34558185 ref NP_908000.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 67.94%
	4	gi 152990473 ref YP_001356195.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 68.69%
	5	gi 157164653 ref YP_001467098.1	Campylobacter concisus 13826	E-value = 0	Identity = 68.11%
AB1015	1	gi 78777300 ref YP_393615.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-64	Identity = 75.00%
	2	gi 149194276 ref ZP_01871373.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-63	Identity = 76.22%
	3	gi 152993292 ref YP_001359013.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-62	Identity = 72.22%
	4	gi 154174978 ref YP_001408082.1	Campylobacter curvus 525.92	E-value = 6.00E-59	Identity = 69.38%
	5	gi 157164743 ref YP_001467085.1	Campylobacter concisus 13826	E-value = 2.00E-57	Identity = 71.34%
AB1016	1	gi 34558114 ref NP_907929.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-144	Identity = 71.59%
	2	gi 152993291 ref YP_001359012.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-143	Identity = 71.88%
	3	gi 78777299 ref YP_393614.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-142	Identity = 70.17%
	4	gi 118475010 ref YP_892184.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-142	Identity = 69.41%
	5	gi 154149000 ref YP_001406815.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-142	Identity = 70.74%
AB1017	1	gi 83313054 ref YP_423318.1	Magnetospirillum magneticum AMB-1	E-value = 3.00E-121	Identity = 64.82%
	2	gi 119947027 ref YP_944707.1	Psychromonas ingrahamii 37	E-value = 4.00E-120	Identity = 65.03%
	3	gi 46201869 ref ZP_00054193.2	Magnetospirillum magnetotacticum MS-1	E-value = 6.00E-119	Identity = 63.52%
	4	gi 149911504 ref ZP_01900119.1	Moritella sp. PE36	E-value = 2.00E-117	Identity = 62.90%
	5	gi 144898842 emb CAM75706.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 1.00E-116	Identity = 62.21%
AB1018	1	gi 152992696 ref YP_001358417.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-32	Identity = 63.16%
	2	gi 152990279 ref YP_001356001.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-32	Identity = 59.83%
	3	gi 154149367 ref YP_001406842.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-30	Identity = 57.63%
	4	gi 154174144 ref YP_001408693.1	Campylobacter curvus 525.92	E-value = 3.00E-28	Identity = 51.75%
	5	gi 57242403 ref ZP_00370341.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-28	Identity = 59.66%
AB1019	1	gi 94968278 ref YP_590326.1	Acidobacteria bacterium Ellin345	E-value = 3.50E-02	Identity = 86.49%
	2	gi 15792896 ref NP_282719.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.20E-02	Identity = 81.08%
	3	gi 57238604 ref YP_179735.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.20E-02	Identity = 81.08%
	4	gi 121612597 ref ZP_01067621.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 4.20E-02	Identity = 81.08%
	5	gi 148925735 ref ZP_01099680.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 4.20E-02	Identity = 81.08%
AB1020	1	gi 154173907 ref YP_001409134.1	Campylobacter curvus 525.92	E-value = 1.00E-45	Identity = 83.61%
	2	gi 118475454 ref YP_891266.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-45	Identity = 85.25%
	3	gi 157164203 ref YP_001467698.1	Campylobacter concisus 13826	E-value = 4.00E-45	Identity = 82.79%
	4	gi 86152866 ref ZP_01071071.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 6.00E-44	Identity = 83.47%
	5	gi 57241594 ref ZP_00369539.1	Campylobacter lari RM2100	E-value = 1.00E-43	Identity = 82.64%
AB1021	1	gi 152989996 ref YP_001355718.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-46	Identity = 78.46%
	2	gi 34558006 ref NP_907821.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-45	Identity = 74.05%

	3	gi 57241593 ref ZP_00369538.1	Campylobacter lari RM2100	E-value = 9.00E-45	Identity = 80.77%
	4	gi 118474117 ref YP_891267.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-44	Identity = 80.77%
	5	gi 153951410 ref YP_001398873.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 4.00E-44	Identity = 82.14%
AB1022	1	<i>rpsD</i> gi 152993918 ref YP_001359639.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-86	Identity = 80.77%
	2	gi 118474712 ref YP_891268.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-83	Identity = 79.33%
	3	gi 78776527 ref YP_392842.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-83	Identity = 78.85%
	4	gi 152989997 ref YP_001355719.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-82	Identity = 80.29%
	5	gi 154174170 ref YP_001409132.1	Campylobacter curvus 525.92	E-value = 2.00E-82	Identity = 77.40%
AB1023	1	<i>rpoA</i> gi 34558004 ref NP_907819.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-108	Identity = 60.12%
	2	gi 32266902 ref NP_860934.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-103	Identity = 57.98%
	3	gi 78776528 ref YP_392843.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-98	Identity = 54.85%
	4	gi 118475267 ref YP_891269.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-98	Identity = 55.56%
	5	gi 154173639 ref YP_001409131.1	Campylobacter curvus 525.92	E-value = 4.00E-97	Identity = 56.33%
AB1024	1	<i>rplQ</i> gi 15792901 ref NP_282724.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-35	Identity = 70.69%
	2	gi 153951800 ref YP_001398876.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 6.00E-35	Identity = 70.69%
	3	gi 57504892 ref ZP_00370867.1	Campylobacter coli RM2228	E-value = 7.00E-35	Identity = 70.69%
	4	gi 57241590 ref ZP_00369535.1	Campylobacter lari RM2100	E-value = 7.00E-35	Identity = 71.55%
	5	gi 57242508 ref ZP_00370446.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-34	Identity = 69.83%
AB1025	1	<i>gatA</i> gi 149195256 ref ZP_01872345.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-161	Identity = 64.10%
	2	gi 78776972 ref YP_393287.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-155	Identity = 66.15%
	3	gi 154149337 ref YP_001406469.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-152	Identity = 64.67%
	4	gi 118474307 ref YP_891787.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-151	Identity = 63.33%
	5	gi 152991024 ref YP_001356746.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-151	Identity = 64.67%
AB1026	1	<i>guaB</i> gi 152991023 ref YP_001356745.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 76.72%
	2	gi 149195257 ref ZP_01872346.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 75.88%
	3	gi 152993377 ref YP_001359098.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 73.96%
	4	gi 78776969 ref YP_393284.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 74.64%
	5	gi 32266201 ref NP_860233.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 70.83%
AB1027	1	gi 89207496 ref ZP_01186036.1	Bacillus weihenstephanensis KBAB4	E-value = 5.00E-25	Identity = 40.82%
	2	gi 118743698 ref ZP_01591700.1	Geobacter lovleyi SZ	E-value = 5.00E-22	Identity = 41.43%
	3	gi 149175943 ref ZP_01854560.1	Planctomyces maris DSM 8797	E-value = 4.00E-19	Identity = 33.33%
	4	gi 123458083 ref XP_001316524.1	Trichomonas vaginalis G3	E-value = 1.00E-15	Identity = 35.04%
	5	gi 157165692 ref YP_001466497.1	Campylobacter concisus 13826	E-value = 3.00E-14	Identity = 38.02%
AB1028	1		*** No matches found ***		
AB1029	1	gi 152993951 ref YP_001359672.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-33	Identity = 25.14%
	2	gi 152994030 ref YP_001359751.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-33	Identity = 25.58%
AB1030	1	gi 78776448 ref YP_392763.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-46	Identity = 47.06%
	2	gi 34557248 ref NP_907063.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-29	Identity = 35.59%
	3	gi 154173869 ref YP_001407525.1	Campylobacter curvus 525.92	E-value = 7.00E-22	Identity = 29.86%
	4	gi 154148783 ref YP_001406911.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-20	Identity = 28.38%
	5	gi 152993952 ref YP_001359673.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-19	Identity = 27.40%
AB1031	1	gi 119946791 ref YP_944471.1	Psychromonas ingrahamii 37	E-value = 2.00E-119	Identity = 51.40%
	2	gi 152995696 ref YP_001340531.1	Marinomonas sp. MWYL1	E-value = 4.00E-113	Identity = 46.34%
	3	gi 34495920 ref NP_900135.1	Chromobacterium violaceum ATCC 12472	E-value = 1.00E-86	Identity = 37.58%
	4	gi 119859815 ref ZP_01641225.1	Pseudomonas putida W619	E-value = 1.00E-83	Identity = 36.79%
	5	gi 104779987 ref YP_606485.1	Pseudomonas entomophila L48	E-value = 1.00E-80	Identity = 36.73%
AB1032	1	gi 91763334 ref ZP_01265298.1	Candidatus Pelagibacter ubique HTCC1002	E-value = 3.00E-42	Identity = 40.93%
	2	gi 71083629 ref YP_266349.1	Candidatus Pelagibacter ubique HTCC1062	E-value = 4.00E-42	Identity = 41.74%
	3	gi 119946790 ref YP_944470.1	Psychromonas ingrahamii 37	E-value = 7.00E-41	Identity = 38.43%



	4	gi 152995697 ref YP_001340532.1	Marinomonas sp. MWYL1	E-value = 1.00E-38	Identity = 39.44%
	5	gi 34495921 ref NP_900136.1	Chromobacterium violaceum ATCC 12472	E-value = 6.00E-35	Identity = 35.85%
AB1033	1		<b>*** No matches found ***</b>		
AB1034	1	gi 119946788 ref YP_944468.1	Psychromonas ingrahamii 37	E-value = 8.00E-92	Identity = 40.22%
	2	gi 152995699 ref YP_001340534.1	Marinomonas sp. MWYL1	E-value = 1.00E-84	Identity = 38.62%
	3	gi 71083630 ref YP_266350.1	Candidatus Pelagibacter ubique HTCC1062	E-value = 7.00E-77	Identity = 37.39%
	4	gi 117924454 ref YP_865071.1	Magnetococcus sp. MC-1	E-value = 2.00E-64	Identity = 32.55%
	5	gi 145219243 ref YP_001129952.1	Prosthecochloris vibriiformis DSM 265	E-value = 6.00E-63	Identity = 33.70%
AB1035	1	gi 152995700 ref YP_001340535.1	Marinomonas sp. MWYL1	E-value = 6.00E-147	Identity = 40.09%
	2	gi 119946787 ref YP_944467.1	Psychromonas ingrahamii 37	E-value = 2.00E-142	Identity = 39.97%
	3	gi 91763332 ref ZP_01265296.1	Candidatus Pelagibacter ubique HTCC1002	E-value = 3.00E-138	Identity = 39.14%
	4	gi 71083631 ref YP_266351.1	Candidatus Pelagibacter ubique HTCC1062	E-value = 3.00E-138	Identity = 39.14%
	5	gi 145219244 ref YP_001129953.1	Prosthecochloris vibriiformis DSM 265	E-value = 4.00E-126	Identity = 34.24%
AB1036	1		<b>*** No matches found ***</b>		
AB1037	1	gi 78777428 ref YP_393743.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-10	Identity = 41.86%
	2	gi 94266013 ref ZP_01289735.1	delta proteobacterium MLMS-1	E-value = 2.00E-07	Identity = 34.48%
	3	gi 77918125 ref YP_355940.1	Pelobacter carbinolicus DSM 2380	E-value = 2.00E-07	Identity = 40.51%
	4	gi 152991077 ref YP_001356799.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-06	Identity = 42.25%
	5	gi 78223140 ref YP_384887.1	Geobacter metallireducens GS-15	E-value = 2.00E-06	Identity = 35.00%
AB1038	1	gi 78778263 ref YP_394578.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-93	Identity = 56.25%
	2	gi 152992043 ref YP_001357764.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-76	Identity = 46.07%
	3	gi 95929642 ref ZP_01312384.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-71	Identity = 43.02%
	4	gi 67939140 ref ZP_00531651.1	Chlorobium phaeobacteroides BS1	E-value = 2.00E-69	Identity = 41.06%
	5	gi 78189925 ref YP_380263.1	Chlorobium chlorochromatii CaD3	E-value = 9.00E-68	Identity = 41.19%
AB1039	1	gi 78776949 ref YP_393264.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-147	Identity = 49.43%
	2	gi 95928674 ref ZP_01311421.1	Desulfuromonas acetoxidans DSM 684	E-value = 5.00E-49	Identity = 26.76%
AB1040	1	gi 78776948 ref YP_393263.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-54	Identity = 53.57%
	2	gi 34557323 ref NP_907138.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-25	Identity = 32.58%
	3	gi 157165169 ref YP_001467840.1	Campylobacter concisus 13826	E-value = 7.00E-24	Identity = 32.57%
	4	gi 157164839 ref YP_001466181.1	Campylobacter concisus 13826	E-value = 2.00E-23	Identity = 34.08%
	5	gi 86152014 ref ZP_01070227.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-23	Identity = 32.88%
AB1041	1		<b>*** No matches found ***</b>		
AB1042	1	gi 119356774 ref YP_911418.1	Chlorobium phaeobacteroides DSM 266	E-value = 4.00E-51	Identity = 38.13%
	2	gi 110598478 ref ZP_01386749.1	Chlorobium ferrooxidans DSM 13031	E-value = 1.00E-50	Identity = 43.65%
	3	gi 21673583 ref NP_661648.1	Chlorobium tepidum TLS	E-value = 2.00E-50	Identity = 40.23%
	4	gi 21226672 ref NP_632594.1	Methanosarcina mazei Go1	E-value = 4.00E-48	Identity = 41.41%
	5	gi 116620929 ref YP_823085.1	Solibacter usitatus Ellin6076	E-value = 5.00E-48	Identity = 39.06%
AB1044	1	gi 34557006 ref NP_906821.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-23	Identity = 40.13%
	2	gi 34557770 ref NP_907585.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-18	Identity = 40.13%
	3	gi 33598198 ref NP_885841.1	Bordetella parapertussis 12822	E-value = 7.00E-18	Identity = 32.28%
	4	gi 30249178 ref NP_841248.1	Nitrosomonas europaea ATCC 19718	E-value = 2.00E-17	Identity = 32.89%
	5	gi 70731436 ref YP_261177.1	Pseudomonas fluorescens Pf-5	E-value = 8.00E-17	Identity = 32.48%
AB1045	1	gi 34557007 ref NP_906822.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-33	Identity = 30.42%
	2	gi 34557769 ref NP_907584.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-32	Identity = 32.18%
	3	gi 70731396 ref YP_261137.1	Pseudomonas fluorescens Pf-5	E-value = 2.00E-25	Identity = 28.71%
	4	gi 123440705 ref YP_001004697.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 2.00E-24	Identity = 26.52%
	5	gi 107100752 ref ZP_01364670.1	Pseudomonas aeruginosa PACS2	E-value = 5.00E-23	Identity = 28.24%
AB1046	1	gi 154503261 ref ZP_02040321.1	Ruminococcus gnavus ATCC 29149	E-value = 2.00E-142	Identity = 68.77%
	2	gi 67475633 ref XP_653507.1	Entamoeba histolytica HM-1:IMSS	E-value = 1.00E-139	Identity = 69.05%

	3	gi 123456594 ref XP_001316031.1	Trichomonas vaginalis G3	E-value = 3.00E-139	Identity = 67.62%
	4	gi 124485586 ref YP_001030202.1	Methanocorpusculum labreanum Z	E-value = 2.00E-137	Identity = 68.77%
	5	gi 153940566 ref YP_001392185.1	Clostridium botulinum F str. Langeland	E-value = 9.00E-137	Identity = 67.52%
AB1047	1	gi 119475255 ref ZP_01615608.1	marine gamma proteobacterium HTCC2143	E-value = 2.00E-41	Identity = 40.49%
	2	gi 54296584 ref YP_122953.1	Legionella pneumophila str. Paris	E-value = 2.00E-37	Identity = 41.46%
	3	gi 52840798 ref YP_094597.1	Legionella pneumophila subsp. pneumophila str. Philadelphia 1	E-value = 2.00E-37	Identity = 41.95%
	4	gi 54293546 ref YP_125961.1	Legionella pneumophila str. Lens	E-value = 4.00E-37	Identity = 41.95%
	5	gi 90021159 ref YP_526986.1	Saccharophagus degradans 2-40	E-value = 3.00E-35	Identity = 40.20%
AB1048	1	gi 90023635 ref YP_529462.1	Saccharophagus degradans 2-40	E-value = 5.00E-40	Identity = 42.49%
	2	gi 88859375 ref ZP_01134015.1	Pseudoalteromonas tunicata D2	E-value = 8.00E-37	Identity = 40.96%
	3	gi 56461176 ref YP_156457.1	Idiomarina loihiensis L2TR	E-value = 1.00E-35	Identity = 39.18%
	4	gi 109899083 ref YP_662338.1	Pseudoalteromonas atlantica T6c	E-value = 1.00E-35	Identity = 39.89%
	5	gi 146302039 ref YP_001196630.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-29	Identity = 35.38%
AB1049	1	gi 149909936 ref ZP_01898585.1	Moritella sp. PE36	E-value = 1.00E-60	Identity = 50.00%
	2	gi 95928960 ref ZP_01311705.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-59	Identity = 43.49%
	3	gi 71281249 ref YP_270708.1	Colwellia psychrerythraea 34H	E-value = 6.00E-58	Identity = 50.00%
	4	gi 54302016 ref YP_132009.1	Photobacterium profundum SS9	E-value = 3.00E-56	Identity = 47.04%
	5	gi 90411431 ref ZP_01219442.1	Photobacterium profundum 3TCK	E-value = 9.00E-55	Identity = 47.39%
AB1050	1	gi 15896187 ref NP_349536.1	Clostridium acetobutylicum ATCC 824	E-value = 5.00E-19	Identity = 41.07%
	2	gi 154149562 ref YP_001403180.1	Candidatus Methanoregula boonei 6A8	E-value = 8.00E-19	Identity = 40.00%
	3	gi 118579542 ref YP_900792.1	Pelobacter propionicus DSM 2379	E-value = 3.00E-18	Identity = 38.61%
	4	gi 134046172 ref YP_001097657.1	Methanococcus maripaludis C5	E-value = 5.00E-18	Identity = 41.12%
	5	gi 118444543 ref YP_879205.1	Clostridium novyi NT	E-value = 9.00E-18	Identity = 39.45%
AB1051	1	gi 37520911 ref NP_924288.1	Gloeobacter violaceus PCC 7421	E-value = 1.00E-36	Identity = 45.81%
	2	gi 154687715 ref YP_001422876.1	Bacillus amyloliquefaciens FZB42	E-value = 1.00E-34	Identity = 44.44%
	3	gi 16079700 ref NP_390524.1	Bacillus subtilis subsp. subtilis str. 168	E-value = 3.00E-34	Identity = 45.03%
	4	gi 16080652 ref NP_391480.1	Bacillus subtilis subsp. subtilis str. 168	E-value = 4.00E-34	Identity = 45.03%
	5	gi 154684981 ref YP_001420142.1	Bacillus amyloliquefaciens FZB42	E-value = 7.00E-34	Identity = 43.53%
AB1052	1	gi 89093655 ref ZP_01166602.1	Oceanospirillum sp. MED92	E-value = 1.00E-66	Identity = 38.59%
	2	gi 94314188 ref YP_587397.1	Ralstonia metallidurans CH34	E-value = 8.00E-57	Identity = 29.29%
	3	gi 124546735 ref ZP_01705770.1	Shewanella putrefaciens 200	E-value = 2.00E-55	Identity = 33.73%
	4	gi 120598907 ref YP_963481.1	Shewanella sp. W3-18-1	E-value = 3.00E-55	Identity = 33.09%
	5	gi 114047606 ref YP_738156.1	Shewanella sp. MR-7	E-value = 4.00E-55	Identity = 34.52%
AB1053	1	gi 75239117 ref ZP_00723097.1	Escherichia coli F11	E-value = 3.00E-22	Identity = 58.65%
	2	gi 91213700 ref YP_543686.1	Escherichia coli UTI89	E-value = 3.00E-22	Identity = 58.65%
	3	gi 39995813 ref NP_951764.1	Geobacter sulfurreducens PCA	E-value = 2.00E-21	Identity = 59.62%
	4	gi 32476724 ref NP_869718.1	Rhodopirellula baltica SH 1	E-value = 4.00E-21	Identity = 57.14%
	5	gi 84319845 ref ZP_00968232.1	Pseudomonas aeruginosa C3719	E-value = 6.00E-21	Identity = 59.22%
AB1054	1	gi 149909936 ref ZP_01898585.1	Moritella sp. PE36	E-value = 3.00E-56	Identity = 48.23%
	2	gi 95928960 ref ZP_01311705.1	Desulfuromonas acetoxidans DSM 684	E-value = 1.00E-55	Identity = 43.15%
	3	gi 54302016 ref YP_132009.1	Photobacterium profundum SS9	E-value = 2.00E-53	Identity = 48.07%
	4	gi 90411431 ref ZP_01219442.1	Photobacterium profundum 3TCK	E-value = 1.00E-51	Identity = 47.37%
	5	gi 71281249 ref YP_270708.1	Colwellia psychrerythraea 34H	E-value = 6.00E-47	Identity = 42.11%
AB1055	1	gi 57168912 ref ZP_00368042.1	Campylobacter coli RM2228	E-value = 3.00E-24	Identity = 32.59%
	2	gi 15792369 ref NP_282192.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 6.00E-23	Identity = 32.12%
	3	gi 57240657 ref ZP_00368605.1	Campylobacter lari RM2100	E-value = 9.00E-21	Identity = 29.63%
	4	gi 124009367 ref ZP_01694045.1	Microscilla marina ATCC 23134	E-value = 1.00E-20	Identity = 28.27%
	5	gi 88713586 ref ZP_01107668.1	Flavobacteriales bacterium HTCC2170	E-value = 2.00E-20	Identity = 30.80%
AB1056	1	gi 152992554 ref YP_001358275.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-55	Identity = 60.57%

	2	gi 146299752 ref YP_001194343.1	Flavobacterium johnsoniae UW101	E-value = 8.00E-53	Identity = 59.88%
	3	gi 150025085 ref YP_001295911.1	Flavobacterium psychrophilum JIP02/86	E-value = 3.00E-51	Identity = 57.80%
	4	gi 88803113 ref ZP_01118639.1	Polaribacter irgensii 23-P	E-value = 1.00E-50	Identity = 56.59%
	5	gi 124009366 ref ZP_01694044.1	Microscilla marina ATCC 23134	E-value = 5.00E-49	Identity = 52.97%
AB1057	1	gi 149194707 ref ZP_01871802.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-56	Identity = 49.30%
	2	gi 152991613 ref YP_001357334.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-48	Identity = 38.73%
	3	gi 152989918 ref YP_001355640.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-40	Identity = 34.02%
	4	gi 37526745 ref NP_930089.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 8.00E-36	Identity = 31.38%
	5	gi 50121648 ref YP_050815.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 4.00E-34	Identity = 30.45%
AB1058	1	gi 150008437 ref YP_001303180.1	Parabacteroides distasonis ATCC 8503	E-value = 5.00E-79	Identity = 49.85%
	2	gi 154490143 ref ZP_02030404.1	Parabacteroides merdae ATCC 43184	E-value = 6.00E-79	Identity = 50.44%
	3	gi 29347329 ref NP_810832.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 3.00E-76	Identity = 51.21%
	4	gi 153809401 ref ZP_01962069.1	Bacteroides caccae ATCC 43185	E-value = 3.00E-75	Identity = 49.70%
	5	gi 60680800 ref YP_210944.1	Bacteroides fragilis NCTC 9343	E-value = 4.00E-74	Identity = 50.45%
AB1059	1	gi 149194763 ref ZP_01871858.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-26	Identity = 35.80%
	2	gi 118577386 ref YP_899626.1	Pelobacter propionicus DSM 2379	E-value = 6.00E-12	Identity = 28.29%
	3	gi 145618143 ref ZP_01774204.1	Geobacter bemidjiensis Bem	E-value = 4.00E-11	Identity = 28.64%
	4	gi 78222366 ref YP_384113.1	Geobacter metallireducens GS-15	E-value = 9.00E-11	Identity = 27.91%
	5	gi 15607050 ref NP_214432.1	Aquifex aeolicus VF5	E-value = 3.00E-10	Identity = 28.40%
AB1060	1	gi 78777357 ref YP_393672.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-70	Identity = 60.27%
	2	gi 145621268 ref ZP_01777245.1	Geobacter bemidjiensis Bem	E-value = 7.00E-46	Identity = 39.33%
	3	gi 56461212 ref YP_156493.1	Idiomarina lohienensis L2TR	E-value = 1.00E-45	Identity = 38.85%
	4	gi 117923887 ref YP_864504.1	Magnetococcus sp. MC-1	E-value = 9.00E-43	Identity = 40.48%
	5	gi 85711171 ref ZP_01042231.1	Idiomarina baltica OS145	E-value = 1.00E-41	Identity = 40.73%
AB1061	1	gi 15896187 ref NP_349536.1	Clostridium acetobutylicum ATCC 824	E-value = 3.00E-23	Identity = 47.66%
	2	gi 34557539 ref NP_907354.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-22	Identity = 44.04%
	3	gi 150017921 ref YP_001310175.1	Clostridium beijerinckii NCIMB 8052	E-value = 6.00E-22	Identity = 47.52%
	4	gi 68056146 ref ZP_00540278.1	Exiguobacterium sibiricum 255-15	E-value = 3.00E-21	Identity = 45.79%
	5	gi 89098840 ref ZP_01171721.1	Bacillus sp. NRRL B-14911	E-value = 4.00E-21	Identity = 46.08%
AB1062	1	gi 148652985 ref YP_001280078.1	Psychrobacter sp. PRwf-1	E-value = 3.00E-45	Identity = 45.36%
	2	gi 123443842 ref YP_001007813.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 1.00E-43	Identity = 45.69%
	3	gi 77978324 ref ZP_00833755.1	Yersinia intermedia ATCC 29909	E-value = 1.00E-43	Identity = 45.69%
	4	gi 16120995 ref NP_404308.1	Yersinia pestis CO92	E-value = 3.00E-43	Identity = 45.41%
	5	gi 77974144 ref ZP_00829686.1	Yersinia frederiksenii ATCC 33641	E-value = 4.00E-43	Identity = 48.62%
AB1063	1	gi 39995367 ref NP_951318.1	Geobacter sulfurreducens PCA	E-value = 2.00E-10	Identity = 32.29%
	2	gi 148262648 ref YP_001229354.1	Geobacter uraniumreducens Rf4	E-value = 1.00E-09	Identity = 38.30%
	3	gi 157370139 ref YP_001478128.1	Serratia proteamaculans 568	E-value = 1.00E-09	Identity = 36.56%
	4	gi 121635232 ref YP_975477.1	Neisseria meningitidis FAM18	E-value = 5.00E-09	Identity = 38.89%
	5	gi 15794657 ref NP_284479.1	Neisseria meningitidis Z2491	E-value = 6.00E-09	Identity = 38.89%
AB1064	1	gi 95931414 ref ZP_01314122.1	Desulfuromonas acetoxidans DSM 684	E-value = 9.00E-123	Identity = 61.11%
	2	gi 154173753 ref YP_001407677.1	Campylobacter curvus 525.92	E-value = 1.00E-101	Identity = 54.71%
	3	gi 118475694 ref YP_891794.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-87	Identity = 50.29%
	4	gi 68054616 ref ZP_00538773.1	Exiguobacterium sibiricum 255-15	E-value = 9.00E-77	Identity = 44.05%
	5	gi 30262063 ref NP_844440.1	Bacillus anthracis str. Ames	E-value = 2.00E-74	Identity = 44.84%
AB1065	1	gi 78778144 ref YP_394459.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-93	Identity = 64.71%
	2	gi 24213214 ref NP_710695.1	Leptospira interrogans serovar Lai str. 56601	E-value = 4.00E-34	Identity = 33.22%
	3	gi 110640174 ref YP_680384.1	Cytophaga hutchinsonii ATCC 33406	E-value = 5.00E-32	Identity = 32.65%
	4	gi 116330189 ref YP_799907.1	Leptospira borgpetersenii serovar Hardjo-ovis JB197	E-value = 1.00E-30	Identity = 30.00%
	5	gi 116329204 ref YP_798924.1	Leptospira borgpetersenii serovar Hardjo-ovis L550	E-value = 1.00E-30	Identity = 30.00%

AB1066	1	gi 78777356 ref YP_393671.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-81	Identity = 68.57%
	2	gi 152992515 ref YP_001358236.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-74	Identity = 65.05%
	3	gi 34558820 gb AAQ75164.1	Alvinella pompejana epibiont 7G3	E-value = 8.00E-66	Identity = 58.45%
	4	gi 152991588 ref YP_001357310.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-56	Identity = 52.88%
	5	gi 154173699 ref YP_001408677.1	Campylobacter curvus 525.92	E-value = 3.00E-47	Identity = 51.92%
AB1067	1		<b>*** No matches found ***</b>		
AB1068	1	gi 34558488 ref NP_908303.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 68.98%
	2	gi 152993062 ref YP_001358783.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 68.5%
	3	gi 78777704 ref YP_394019.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 70.06%
	4	gi 15645472 ref NP_207647.1	Helicobacter pylori 26695	E-value = 0	Identity = 67.29%
	5	gi 108563262 ref YP_627578.1	Helicobacter pylori HPAG1	E-value = 0	Identity = 66.73%
AB1069	1	gi 118050897 ref ZP_01519446.1	Comamonas testosteroni KF-1	E-value = 4.00E-48	Identity = 65.00%
	2	gi 146283890 ref YP_001174043.1	Pseudomonas stutzeri A1501	E-value = 1.00E-47	Identity = 63.64%
	3	gi 119897558 ref YP_932771.1	Azoarcus sp. BH72	E-value = 3.00E-47	Identity = 64.29%
	4	gi 119877843 ref ZP_01644822.1	Stenotrophomonas maltophilia R551-3	E-value = 3.00E-47	Identity = 58.28%
	5	gi 121532736 ref ZP_01664580.1	Ralstonia pickettii 12J	E-value = 9.00E-47	Identity = 60.93%
AB1070	1	gi 34557239 ref NP_907054.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-45	Identity = 32.27%
	2	gi 153952029 ref YP_001398846.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-40	Identity = 28.76%
AB1071	1	<i>lig</i> gi 152992057 ref YP_001357778.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 64.51%
	2	gi 78777542 ref YP_393857.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 59.35%
	3	gi 157164612 ref YP_001467146.1	Campylobacter concisus 13826	E-value = 0	Identity = 56.72%
	4	gi 34558095 ref NP_907910.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 54.48%
	5	gi 149195296 ref ZP_01872384.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 54.65%
AB1072	1	gi 152992208 ref YP_001357929.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-156	Identity = 67.86%
	2	gi 157163954 ref YP_001466095.1	Campylobacter concisus 13826	E-value = 2.00E-151	Identity = 69.21%
	3	gi 154173717 ref YP_001407471.1	Campylobacter curvus 525.92	E-value = 3.00E-148	Identity = 66.41%
	4	gi 57241703 ref ZP_00369648.1	Campylobacter lari RM2100	E-value = 3.00E-147	Identity = 66.84%
	5	gi 118475672 ref YP_892788.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-143	Identity = 64.89%
AB1073	1	gi 154175293 ref YP_001407472.1	Campylobacter curvus 525.92	E-value = 3.00E-46	Identity = 54.69%
	2	gi 152992209 ref YP_001357930.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-42	Identity = 54.59%
	3	gi 34556994 ref NP_906809.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-37	Identity = 49.51%
	4	gi 118474118 ref YP_892786.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-36	Identity = 48.28%
	5	gi 157164431 ref YP_001466094.1	Campylobacter concisus 13826	E-value = 6.00E-36	Identity = 47.28%
AB1074	1	<i>dgt</i> gi 119471009 ref ZP_01613568.1	Alteromonadales bacterium TW-7	E-value = 2.00E-105	Identity = 42.97%
	2	gi 77362030 ref YP_341604.1	Pseudoalteromonas haloplanktis TAC125	E-value = 1.00E-101	Identity = 42.91%
	3	gi 146310364 ref YP_001175438.1	Enterobacter sp. 638	E-value = 2.00E-101	Identity = 40.71%
	4	gi 157147408 ref YP_001454727.1	Citrobacter koseri ATCC BAA-895	E-value = 2.00E-100	Identity = 40.94%
	5	gi 6685388 sp Q59827 DGTP_SHIBO	Shigella boydii	E-value = 4.00E-100	Identity = 41.37%
AB1076	1	<i>mloA</i> gi 19881268 gb AAM00873.1 AF486555_4	Campylobacter jejuni	E-value = 3.00E-96	Identity = 57.06%
	2	gi 19881225 gb AAM00837.1 AF486548_4	Campylobacter jejuni	E-value = 3.00E-96	Identity = 57.06%
	3	gi 19881251 gb AAM00859.1 AF486552_5	Campylobacter jejuni	E-value = 5.00E-96	Identity = 56.78%
	4	gi 86153169 ref ZP_01071374.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 6.00E-96	Identity = 56.50%
	5	gi 19881229 gb AAM00840.1 AF486549_2	Campylobacter jejuni	E-value = 1.00E-95	Identity = 56.78%
AB1077	1	gi 15677601 ref NP_274759.1	Neisseria meningitidis MC58	E-value = 7.00E-30	Identity = 29.35%
	2	gi 145956009 ref ZP_01805007.1	Clostridium difficile QCD-32g58	E-value = 1.00E-29	Identity = 30.79%
	3	gi 126180058 ref YP_001048023.1	Methanoculleus marisnigri JR1	E-value = 1.00E-22	Identity = 30.22%
	4	gi 149196785 ref ZP_01873838.1	Lentisphaera araneosa HTCC2155	E-value = 7.00E-21	Identity = 26.02%
	5	gi 150401094 ref YP_001324860.1	Methanococcus aeolicus Nankai-3	E-value = 9.00E-20	Identity = 30.28%
AB1080	1	<i>aroE</i> gi 78777476 ref YP_393791.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-68	Identity = 53.54%

	2	gi 152992066 ref YP_001357787.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-64	Identity = 50.79%
	3	gi 152990925 ref YP_001356647.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-63	Identity = 51.53%
	4	gi 154175195 ref YP_001407793.1	Campylobacter curvus 525.92	E-value = 1.00E-60	Identity = 47.33%
	5	gi 157165583 ref YP_001467465.1	Campylobacter concisus 13826	E-value = 1.00E-59	Identity = 48.28%
AB1081	1	gi 152991048 ref YP_001356770.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-30	Identity = 39.90%
	2	gi 74317073 ref YP_314813.1	Thiobacillus denitrificans ATCC 25259	E-value = 2.00E-28	Identity = 33.01%
	3	gi 118579301 ref YP_900551.1	Pelobacter propionicus DSM 2379	E-value = 4.00E-27	Identity = 32.64%
	4	gi 34557883 ref NP_907698.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-26	Identity = 40.00%
	5	gi 67939622 ref ZP_00532117.1	Chlorobium phaeobacteroides BS1	E-value = 9.00E-26	Identity = 35.89%
AB1082	1	gi 78776677 ref YP_392992.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-37	Identity = 43.75%
	2	gi 82523974 emb CAI78785.1	uncultured epsilon proteobacterium	E-value = 1.00E-34	Identity = 40.79%
	3	gi 91201670 emb CAJ74730.1	Candidatus Kuenenia stuttgartiensis	E-value = 4.00E-29	Identity = 35.54%
	4	gi 68055464 ref ZP_00539609.1	Exiguobacterium sibiricum 255-15	E-value = 9.00E-29	Identity = 34.93%
	5	gi 154174292 ref YP_001407656.1	Campylobacter curvus 525.92	E-value = 1.00E-28	Identity = 37.67%
AB1083	1	maeA gi 152992111 ref YP_001357832.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-134	Identity = 60.67%
	2	gi 154149335 ref YP_001405725.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-132	Identity = 61.99%
	3	gi 154175276 ref YP_001408952.1	Campylobacter curvus 525.92	E-value = 2.00E-131	Identity = 61.74%
	4	gi 152991381 ref YP_001357103.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-130	Identity = 61.22%
	5	gi 66043668 ref YP_233509.1	Pseudomonas syringae pv. syringae B728a	E-value = 8.00E-126	Identity = 57.39%
AB1084	1	purU gi 151570319 gb EDN35973.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 4.00E-95	Identity = 62.82%
	2	gi 151571770 gb EDN37424.1	Francisella tularensis subsp. novicida GA99-3548	E-value = 9.00E-95	Identity = 62.82%
	3	gi 118497226 ref YP_898276.1	Francisella tularensis subsp. novicida U112	E-value = 2.00E-94	Identity = 62.45%
	4	gi 34557815 ref NP_907630.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-92	Identity = 58.48%
	5	gi 152993290 ref YP_001359011.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-92	Identity = 62.50%
AB1085	1	gi 57241070 ref ZP_00369017.1	Campylobacter lari RM2100	E-value = 2.00E-41	Identity = 56.77%
	2	gi 152993289 ref YP_001359010.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-41	Identity = 51.95%
	3	gi 34557814 ref NP_907629.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-41	Identity = 51.32%
	4	gi 118474338 ref YP_891998.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-41	Identity = 51.95%
	5	gi 86152124 ref ZP_01070336.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-40	Identity = 53.90%
AB1086	1		<b>*** No matches found ***</b>		
AB1087	1	gi 78777160 ref YP_393475.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 68.98%
	2	gi 78778137 ref YP_394452.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-134	Identity = 49.19%
	3	gi 89093328 ref ZP_01166277.1	Oceanospirillum sp. MED92	E-value = 1.00E-125	Identity = 42.91%
	4	gi 88711423 ref ZP_01105511.1	Flavobacteriales bacterium HTCC2170	E-value = 1.00E-110	Identity = 40.67%
	5	gi 117923542 ref YP_864159.1	Magnetococcus sp. MC-1	E-value = 1.00E-110	Identity = 40.75%
AB1088	1		<b>*** No matches found ***</b>		
AB1089	1		<b>*** No matches found ***</b>		
AB1090	1	gi 152993763 ref YP_001359484.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-46	Identity = 47.93%
	2	gi 152991168 ref YP_001356890.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-39	Identity = 45.16%
	3	gi 78776824 ref YP_393139.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-37	Identity = 43.58%
	4	gi 157164687 ref YP_001466781.1	Campylobacter concisus 13826	E-value = 1.00E-36	Identity = 40.83%
	5	gi 34556531 ref NP_906346.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-36	Identity = 41.20%
AB1091	1	gi 152993762 ref YP_001359483.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-36	Identity = 37.12%
	2	gi 152991167 ref YP_001356889.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-33	Identity = 40.74%
	3	gi 4104349 gb AAD02004.1	Campylobacter rectus	E-value = 3.00E-14	Identity = 29.60%
AB1092	1	gi 157165096 ref YP_001466403.1	Campylobacter concisus 13826	E-value = 2.00E-89	Identity = 64.29%
	2	gi 32266355 ref NP_860387.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-83	Identity = 61.68%
	3	gi 154149444 ref YP_001406590.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-79	Identity = 63.18%
	4	gi 34557241 ref NP_907056.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-78	Identity = 53.20%

	5	gi 118588415 ref ZP_01545824.1	Stappia aggregata IAM 12614	E-value = 4.00E-50	Identity = 39.66%
AB1093	1	gi 32266354 ref NP_860386.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-11	Identity = 33.57%
	2	gi 154148669 ref YP_001406589.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-10	Identity = 42.11%
	3	gi 157165675 ref YP_001466404.1	Campylobacter concisus 13826	E-value = 8.00E-10	Identity = 33.82%
	4	gi 154174670 ref YP_001407959.1	Campylobacter curvus 525.92	E-value = 2.00E-06	Identity = 30.22%
AB1094	1	gi 156719420 ref ZP_02061056.1	Hydrogenobaculum sp. Y04AAS1	E-value = 1.00E-09	Identity = 32.76%
AB1095	1	gi 154173945 ref YP_001409214.1	Campylobacter curvus 525.92	E-value = 2.00E-111	Identity = 60.05%
	2	gi 32266601 ref NP_860633.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-110	Identity = 59.63%
	3	gi 57168761 ref ZP_00367892.1	Campylobacter coli RM2228	E-value = 6.00E-107	Identity = 61.66%
	4	gi 86154030 ref ZP_01072231.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 5.00E-105	Identity = 63.13%
	5	gi 15791472 ref NP_281295.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-105	Identity = 62.60%
AB1096	1	gi 86154010 ref ZP_01072211.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 0	Identity = 69.88%
	2	gi 157414395 ref YP_001481651.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 0	Identity = 69.88%
	3	gi 57237089 ref YP_178101.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 0	Identity = 69.88%
	4	gi 15791471 ref NP_281294.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 0	Identity = 69.68%
	5	gi 86149602 ref ZP_01067832.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 0	Identity = 69.88%
AB1097	1		<b>*** No matches found ***</b>		
AB1098	1	gi 68552744 ref ZP_00592130.1	Prosthecochloris aestuarii DSM 271	E-value = 1.00E-27	Identity = 49.28%
	2	gi 67937922 ref ZP_00530452.1	Chlorobium phaeobacteroides BS1	E-value = 1.00E-26	Identity = 52.76%
	3	gi 88792732 ref ZP_01108450.1	Alteromonas macleodii 'Deep ecotype'	E-value = 2.00E-26	Identity = 48.98%
	4	gi 21673835 ref NP_661900.1	Chlorobium tepidum TLS	E-value = 4.00E-23	Identity = 47.06%
	5	gi 149927292 ref ZP_01915548.1	Limnobacter sp. MED105	E-value = 2.00E-18	Identity = 43.80%
AB1099	1	gi 34557380 ref NP_907195.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-92	Identity = 52.86%
	2	gi 78189564 ref YP_379902.1	Chlorobium chlorochromatii CaD3	E-value = 5.00E-92	Identity = 50.00%
	3	gi 68551751 ref ZP_00591145.1	Prosthecochloris aestuarii DSM 271	E-value = 2.00E-84	Identity = 46.34%
	4	gi 88797524 ref ZP_01113113.1	Reinekea sp. MED297	E-value = 2.00E-76	Identity = 44.79%
	5	gi 118048683 ref ZP_01517274.1	Chloroflexus aggregans DSM 9485	E-value = 5.00E-71	Identity = 40.99%
AB1100	1	gi 110599668 ref ZP_01387903.1	Geobacter sp. FRC-32	E-value = 6.00E-20	Identity = 37.91%
	2	gi 145637539 ref ZP_01793196.1	Haemophilus influenzae PittHH	E-value = 2.00E-19	Identity = 37.43%
	3	gi 68249923 ref YP_249035.1	Haemophilus influenzae 86-028NP	E-value = 1.00E-18	Identity = 36.77%
	4	gi 126640192 ref YP_001083176.1	Acinetobacter baumannii ATCC 17978	E-value = 5.00E-18	Identity = 38.13%
	5	gi 148264055 ref YP_001230761.1	Geobacter uraniumreducens Rf4	E-value = 1.00E-17	Identity = 33.33%
AB1101	1		<b>*** No matches found ***</b>		
AB1102	1	gi 126663053 ref ZP_01734051.1	Flavobacteria bacterium BAL38	E-value = 8.00E-54	Identity = 50.94%
	2	gi 86135051 ref ZP_01053633.1	Tenacibaculum sp. MED152	E-value = 2.00E-52	Identity = 51.69%
	3	gi 88804827 ref ZP_01120347.1	Robiginitalea biformata HTCC2501	E-value = 4.00E-52	Identity = 47.50%
	4	gi 149910268 ref ZP_01898912.1	Moritella sp. PE36	E-value = 7.00E-52	Identity = 49.77%
	5	gi 88860140 ref ZP_01134779.1	Pseudoalteromonas tunicata D2	E-value = 1.00E-51	Identity = 48.83%
AB1103	1	gi 78778204 ref YP_394519.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-86	Identity = 64.47%
	2	gi 83311576 ref YP_421840.1	Magnetospirillum magneticum AMB-1	E-value = 2.00E-58	Identity = 48.13%
	3	gi 114800237 ref YP_759483.1	Hyphomonas neptunium ATCC 15444	E-value = 7.00E-58	Identity = 49.55%
	4	gi 144900938 emb CAM77802.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 4.00E-57	Identity = 48.61%
	5	gi 46202419 ref ZP_00053237.2	Magnetospirillum magnetotacticum MS-1	E-value = 5.00E-56	Identity = 46.76%
AB1104	1	gi 152992674 ref YP_001358395.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-46	Identity = 49.50%
	2	gi 152991591 ref YP_001357313.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-37	Identity = 42.64%
	3	gi 78777117 ref YP_393432.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-32	Identity = 39.68%
	4	gi 154148415 ref YP_001406455.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-27	Identity = 37.70%
	5	gi 154173736 ref YP_001408393.1	Campylobacter curvus 525.92	E-value = 3.00E-24	Identity = 35.89%
AB1105	1	gi 78777444 ref YP_393759.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-47	Identity = 50.90%

	2	gi 34556823 ref NP_906638.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-24	Identity = 40.37%
	3	gi 78777504 ref YP_393819.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-17	Identity = 35.57%
	4	gi 23015450 ref ZP_00055226.1	Magnetospirillum magnetotacticum MS-1	E-value = 3.00E-11	Identity = 31.82%
AB1106	1	gi 78777443 ref YP_393758.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-60	Identity = 60.18%
	2	gi 152992851 ref YP_001358572.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-59	Identity = 55.90%
	3	gi 152991484 ref YP_001357206.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-52	Identity = 50.66%
	4	gi 34557090 ref NP_906905.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-49	Identity = 55.61%
	5	gi 32267034 ref NP_861066.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-27	Identity = 38.84%
AB1107	1		<b>*** No matches found ***</b>		
AB1108	1	gi 56477715 ref YP_159304.1	Azoarcus sp. EbN1	E-value = 6.00E-132	Identity = 42.44%
	2	gi 119899845 ref YP_935058.1	Azoarcus sp. BH72	E-value = 9.00E-129	Identity = 40.03%
	3	gi 78776319 ref YP_392634.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-108	Identity = 39.01%
	4	gi 34557598 ref NP_907413.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-71	Identity = 31.90%
	5	gi 110833489 ref YP_692348.1	Alcanivorax borkumensis SK2	E-value = 7.00E-37	Identity = 26.47%
AB1109	1	gi 78776318 ref YP_392633.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-36	Identity = 38.06%
	2	gi 149200637 ref ZP_01877639.1	Lentisphaera araneosa HTCC2155	E-value = 1.00E-20	Identity = 31.32%
	3	gi 91794204 ref YP_563855.1	Shewanella denitrificans OS217	E-value = 4.00E-19	Identity = 25.77%
	4	gi 88860274 ref ZP_01134912.1	Pseudoalteromonas tunicata D2	E-value = 6.00E-19	Identity = 27.60%
	5	gi 85858072 ref YP_460274.1	Syntrophus aciditrophicus SB	E-value = 2.00E-18	Identity = 27.97%
AB1110	1	gi 78776317 ref YP_392632.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-21	Identity = 37.34%
	2	gi 124485972 ref YP_001030588.1	Methanocorpusculum labreanum Z	E-value = 9.00E-18	Identity = 27.90%
	3	gi 14521214 ref NP_126689.1	Pyrococcus abyssi GE5	E-value = 1.00E-17	Identity = 30.13%
	4	gi 14591054 ref NP_143129.1	Pyrococcus horikoshii OT3	E-value = 8.00E-16	Identity = 29.44%
	5	gi 88601601 ref YP_501779.1	Methanospirillum hungatei JF-1	E-value = 1.00E-15	Identity = 27.90%
AB1111	1	gi 78776316 ref YP_392631.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-50	Identity = 42.81%
	2	gi 77164356 ref YP_342881.1	Nitrosococcus oceani ATCC 19707	E-value = 2.00E-34	Identity = 38.31%
	3	gi 116750166 ref YP_846853.1	Syntrophobacter fumaroxidans MPOB	E-value = 2.00E-33	Identity = 33.45%
	4	gi 154150529 ref YP_001404147.1	Candidatus Methanoregula boonei 6A8	E-value = 6.00E-33	Identity = 34.04%
	5	gi 52141138 ref YP_085691.1	Bacillus cereus E33L	E-value = 1.00E-31	Identity = 29.06%
AB1112	1	gi 110638733 ref YP_678942.1	Cytophaga hutchinsonii ATCC 33406	E-value = 3.00E-36	Identity = 46.30%
	2	gi 124002665 ref ZP_01687517.1	Microscilla marina ATCC 23134	E-value = 1.00E-35	Identity = 45.06%
	3	gi 67939139 ref ZP_00531650.1	Chlorobium phaeobacteroides BS1	E-value = 5.00E-35	Identity = 41.46%
	4	gi 152993478 ref YP_001359199.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-34	Identity = 43.21%
	5	gi 119358347 ref YP_912991.1	Chlorobium phaeobacteroides DSM 266	E-value = 9.00E-34	Identity = 43.83%
AB1113	1	gi 78776270 ref YP_392585.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 65.14%
	2	gi 152993024 ref YP_001358745.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-140	Identity = 49.31%
	3	gi 89094030 ref ZP_01166974.1	Oceanospirillum sp. MED92	E-value = 2.00E-136	Identity = 43.08%
	4	gi 156974631 ref YP_001445538.1	Vibrio harveyi ATCC BAA-1116	E-value = 1.00E-135	Identity = 43.49%
	5	gi 152990485 ref YP_001356207.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-135	Identity = 45.47%
AB1114	1		<b>*** No matches found ***</b>		
AB1115	1	gi 152991031 ref YP_001356753.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-61	Identity = 59.63%
	2	gi 152992275 ref YP_001357996.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-60	Identity = 58.72%
	3	gi 78777562 ref YP_393877.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-52	Identity = 53.67%
	4	gi 152992978 ref YP_001358699.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-47	Identity = 49.77%
	5	gi 57242734 ref ZP_00370671.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-46	Identity = 47.71%
AB1116	1	gi 152991032 ref YP_001356754.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-88	Identity = 46.60%
	2	gi 152992276 ref YP_001357997.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-82	Identity = 43.94%
	3	gi 78777563 ref YP_393878.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-70	Identity = 42.05%
	4	gi 152992979 ref YP_001358700.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-62	Identity = 34.72%

	5	gi 32267156 ref NP_861188.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-42	Identity = 28.77%
AB1117	1	gi 152992277 ref YP_001357998.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-19	Identity = 46.85%
	2	gi 152992980 ref YP_001358701.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-12	Identity = 39.78%
	3	gi 78777564 ref YP_393879.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-10	Identity = 33.04%
	4	gi 152991033 ref YP_001356755.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-07	Identity = 28.32%
AB1118	1		<b>*** No matches found ***</b>		
AB1119	1	gi 20807004 ref NP_622175.1	Thermoanaerobacter tengcongensis MB4	E-value = 5.00E-07	Identity = 26.11%
	2	gi 77918718 ref YP_356533.1	Pelobacter carbinolicus DSM 2380	E-value = 5.00E-06	Identity = 25.62%
AB1120	1	gi 150400976 ref YP_001324742.1	Methanococcus aeolicus Nankai-3	E-value = 2.00E-41	Identity = 52.05%
AB1121	1	gi 114778329 ref ZP_01453188.1	Mariprofundus ferrooxydans PV-1	E-value = 1.00E-26	Identity = 27.74%
	2	gi 56461165 ref YP_156446.1	Idiomarina loihiensis L2TR	E-value = 2.00E-26	Identity = 28.78%
	3	gi 152994439 ref YP_001339274.1	Marinomonas sp. MWYL1	E-value = 6.00E-26	Identity = 27.95%
AB1122	1		<b>*** No matches found ***</b>		
AB1123	1	gi 56460652 ref YP_155933.1	Idiomarina loihiensis L2TR	E-value = 3.00E-78	Identity = 47.23%
	2	gi 37525462 ref NP_928806.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 4.00E-78	Identity = 46.13%
	3	gi 134095351 ref YP_001100426.1	Herminiimonas arsenicoxydans	E-value = 6.00E-77	Identity = 45.43%
	4	gi 119468751 ref ZP_01611803.1	Alteromonadales bacterium TW-7	E-value = 9.00E-76	Identity = 44.44%
	5	gi 77362320 ref YP_341894.1	Pseudoalteromonas haloplanktis TAC125	E-value = 3.00E-74	Identity = 43.30%
AB1124	1	gi 118743958 ref ZP_01591957.1	Geobacter lovleyi SZ	E-value = 6.00E-52	Identity = 32.16%
	2	gi 152991361 ref YP_001357083.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-48	Identity = 38.21%
	3	gi 118745838 ref ZP_01593802.1	Geobacter lovleyi SZ	E-value = 5.00E-44	Identity = 29.85%
	4	gi 110599469 ref ZP_01387707.1	Geobacter sp. FRC-32	E-value = 6.00E-43	Identity = 32.31%
	5	gi 78777441 ref YP_393756.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-41	Identity = 33.51%
AB1125	1	gi 152993952 ref YP_001359673.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-37	Identity = 41.82%
	2	gi 152993408 ref YP_001359129.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-32	Identity = 37.61%
	3	gi 34558806 gb AAQ75151.1	Alvinella pompejana epibiont 6C6	E-value = 8.00E-32	Identity = 40.36%
	4	gi 78778185 ref YP_394500.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-31	Identity = 35.96%
	5	gi 34557323 ref NP_907138.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-30	Identity = 34.40%
AB1126	1		<b>*** No matches found ***</b>		
AB1127	1	gi 154173935 ref YP_001408654.1	Campylobacter curvus 525.92	E-value = 0	Identity = 52.79%
	2	gi 157164509 ref YP_001466532.1	Campylobacter concisus 13826	E-value = 0	Identity = 53.75%
	3	gi 78484552 ref YP_390477.1	Thiomicrospira crunogena XCL-2	E-value = 0	Identity = 47.52%
	4	gi 51244365 ref YP_064249.1	Desulfotalea psychrophila LSv54	E-value = 0	Identity = 46.27%
	5	gi 89094686 ref ZP_01167622.1	Oceanospirillum sp. MED92	E-value = 3.00E-178	Identity = 46.52%
AB1128	1	gi 50122191 ref YP_051358.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 1.00E-87	Identity = 41.75%
	2	gi 157165040 ref YP_001466533.1	Campylobacter concisus 13826	E-value = 9.00E-86	Identity = 43.26%
	3	gi 154174251 ref YP_001408653.1	Campylobacter curvus 525.92	E-value = 7.00E-85	Identity = 42.33%
	4	gi 119856615 ref ZP_01638047.1	Pseudomonas putida W619	E-value = 5.00E-84	Identity = 39.85%
	5	gi 146306833 ref YP_001187298.1	Pseudomonas mendocina ymp	E-value = 4.00E-83	Identity = 40.00%
AB1129	1	gi 51244367 ref YP_064251.1	Desulfotalea psychrophila LSv54	E-value = 4.00E-15	Identity = 27.08%
	2	gi 157164514 ref YP_001466535.1	Campylobacter concisus 13826	E-value = 8.00E-15	Identity = 29.56%
	3	gi 154175194 ref YP_001408651.1	Campylobacter curvus 525.92	E-value = 1.00E-13	Identity = 28.43%
	4	gi 78484550 ref YP_390475.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-12	Identity = 28.14%
	5	gi 37679701 ref NP_934310.1	Vibrio vulnificus YJ016	E-value = 6.00E-08	Identity = 26.26%
AB1130	1	gi 154174597 ref YP_001408656.1	Campylobacter curvus 525.92	E-value = 5.00E-42	Identity = 45.69%
	2	gi 157164834 ref YP_001466530.1	Campylobacter concisus 13826	E-value = 4.00E-38	Identity = 45.25%
	3	gi 109897405 ref YP_660660.1	Pseudoalteromonas atlantica T6c	E-value = 3.00E-36	Identity = 45.56%
	4	gi 89093183 ref ZP_01166133.1	Oceanospirillum sp. MED92	E-value = 7.00E-36	Identity = 46.63%
	5	gi 78484554 ref YP_390479.1	Thiomicrospira crunogena XCL-2	E-value = 9.00E-36	Identity = 43.43%



AB1131	1	gi 157164294 ref YP_001466531.1	Campylobacter concisus 13826	E-value = 8.00E-47	Identity = 26.83%
	2	gi 154175034 ref YP_001408655.1	Campylobacter curvus 525.92	E-value = 9.00E-47	Identity = 26.66%
	3	gi 78484553 ref YP_390478.1	Thiomicrospira crunogena XCL-2	E-value = 3.00E-46	Identity = 25.51%
	4	gi 152996838 ref YP_001341673.1	Marinomonas sp. MWYL1	E-value = 4.00E-44	Identity = 25.19%
	5	gi 51244369 ref YP_064253.1	Desulfotalea psychrophila LSv54	E-value = 1.00E-42	Identity = 26.75%
AB1132	1	aroB gi 152992603 ref YP_001358324.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-123	Identity = 64.16%
	2	gi 78777218 ref YP_393533.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-123	Identity = 65.32%
	3	gi 152990827 ref YP_001356549.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-122	Identity = 61.79%
	4	gi 32266381 ref NP_860413.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-117	Identity = 62.09%
	5	gi 34557850 ref NP_907665.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-115	Identity = 61.19%
AB1133	1	gi 78777219 ref YP_393534.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-115	Identity = 45.28%
	2	gi 154174819 ref YP_001408234.1	Campylobacter curvus 525.92	E-value = 9.00E-113	Identity = 44.89%
	3	gi 152992604 ref YP_001358325.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-112	Identity = 45.60%
	4	gi 118475324 ref YP_892030.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-109	Identity = 45.19%
	5	gi 157164128 ref YP_001466754.1	Campylobacter concisus 13826	E-value = 8.00E-108	Identity = 42.71%
AB1134	1	gi 152990825 ref YP_001356547.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-157	Identity = 66.59%
	2	gi 152992605 ref YP_001358326.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-156	Identity = 63.29%
	3	gi 78777220 ref YP_393535.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-151	Identity = 60.87%
	4	gi 34557848 ref NP_907663.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-140	Identity = 59.47%
	5	gi 154175462 ref YP_001408235.1	Campylobacter curvus 525.92	E-value = 2.00E-132	Identity = 55.42%
AB1135	1	ftsH2 gi 149193778 ref ZP_01870876.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-98	Identity = 45.88%
	2	gi 32266378 ref NP_860410.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-98	Identity = 46.83%
	3	gi 157164271 ref YP_001466756.1	Campylobacter concisus 13826	E-value = 2.00E-96	Identity = 45.20%
	4	gi 154148871 ref YP_001406629.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-93	Identity = 48.71%
	5	gi 57242029 ref ZP_00369969.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-92	Identity = 44.93%
AB1136	1	gi 152992607 ref YP_001358328.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-37	Identity = 50.60%
	2	gi 152990823 ref YP_001356545.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-31	Identity = 46.75%
	3	gi 34557846 ref NP_907661.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-29	Identity = 43.20%
	4	gi 78777222 ref YP_393537.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-28	Identity = 48.52%
	5	gi 15644915 ref NP_207085.1	Helicobacter pylori 26695	E-value = 2.00E-24	Identity = 43.20%
AB1137	1	mog gi 113947990 ref ZP_01433653.1	Shewanella baltica OS195	E-value = 2.00E-74	Identity = 81.40%
	2	gi 91795033 ref YP_564684.1	Shewanella denitrificans OS217	E-value = 2.00E-74	Identity = 80.81%
	3	gi 24371665 ref NP_715707.1	Shewanella oneidensis MR-1	E-value = 2.00E-74	Identity = 81.40%
	4	gi 59713748 ref YP_206523.1	Vibrio fischeri ES114	E-value = 6.00E-74	Identity = 80.79%
	5	gi 90414003 ref ZP_01221987.1	Photobacterium profundum 3TCK	E-value = 2.00E-73	Identity = 79.19%
AB1138	1	ribB gi 118578754 ref YP_900004.1	Pelobacter propionicus DSM 2379	E-value = 3.00E-64	Identity = 55.61%
	2	gi 78356097 ref YP_387546.1	Desulfovibrio desulfuricans G20	E-value = 1.00E-62	Identity = 53.23%
	3	gi 95929160 ref ZP_01311904.1	Desulfuromonas acetoxidans DSM 684	E-value = 5.00E-62	Identity = 57.00%
	4	gi 146301799 ref YP_001196390.1	Flavobacterium johnsoniae UW101	E-value = 6.00E-62	Identity = 57.21%
	5	gi 156977451 ref YP_001448357.1	Vibrio Harveyi ATCC BAA-1116	E-value = 7.00E-62	Identity = 57.14%
AB1139	1	gi 152992512 ref YP_001358233.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-64	Identity = 67.55%
	2	gi 126640101 ref YP_001083088.1	Acinetobacter baumannii ATCC 17978	E-value = 2.00E-60	Identity = 57.67%
	3	gi 126659953 ref ZP_01731076.1	Cyanothece sp. CCY0110	E-value = 5.00E-55	Identity = 55.56%
	4	gi 39996649 ref NP_952600.1	Geobacter sulfurreducens PCA	E-value = 1.00E-54	Identity = 52.38%
	5	gi 89092916 ref ZP_01165868.1	Oceanospirillum sp. MED92	E-value = 1.00E-53	Identity = 51.85%
AB1140	1	gi 24380445 ref NP_722400.1	Streptococcus mutans UA159	E-value = 4.00E-11	Identity = 34.29%
	2	gi 150016702 ref YP_001308956.1	Clostridium beijerinckii NCIMB 8052	E-value = 2.00E-10	Identity = 34.44%
	3	gi 68053910 ref ZP_00538075.1	Exiguobacterium sibiricum 255-15	E-value = 2.00E-08	Identity = 28.02%
	4	gi 51894351 ref YP_077042.1	Symbiobacterium thermophilum IAM 14863	E-value = 1.00E-07	Identity = 26.16%

	5	gi 15613299 ref NP_241602.1	Bacillus halodurans C-125	E-value = 3.00E-06	Identity = 30.56%
AB1141	1	gi 126172472 ref YP_001048621.1	Shewanella baltica OS155	E-value = 7.00E-16	Identity = 52.00%
	2	gi 149117081 ref ZP_01843788.1	Shewanella baltica OS223	E-value = 2.00E-15	Identity = 52.00%
	3	gi 24375998 ref NP_720041.1	Shewanella oneidensis MR-1	E-value = 2.00E-15	Identity = 51.95%
	4	gi 113950814 ref ZP_01436426.1	Shewanella baltica OS195	E-value = 4.00E-15	Identity = 50.65%
	5	gi 120597232 ref YP_961806.1	Shewanella sp. W3-18-1	E-value = 6.00E-15	Identity = 50.65%
AB1142	1		*** No matches found ***		
AB1143	1	gi 124010463 ref ZP_01695102.1	Microscilla marina ATCC 23134	E-value = 1.00E-15	Identity = 36.84%
	2	gi 37520282 ref NP_923659.1	Gloeobacter violaceus PCC 7421	E-value = 3.00E-15	Identity = 33.33%
AB1144	1	gi 32266448 ref NP_860480.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-09	Identity = 56.92%
	2	gi 152994012 ref YP_001359733.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-07	Identity = 43.59%
	3	gi 118474627 ref YP_892564.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-07	Identity = 35.90%
	4	gi 57168434 ref ZP_00367568.1	Campylobacter coli RM2228	E-value = 5.00E-07	Identity = 42.19%
AB1145	1		*** No matches found ***		
AB1146	1	gi 71738045 ref YP_273514.1	Pseudomonas syringae pv. phaseolicola 1448A	E-value = 2.00E-36	Identity = 45.22%
	2	gi 66044431 ref YP_234272.1	Pseudomonas syringae pv. syringae B728a	E-value = 3.00E-35	Identity = 44.81%
	3	gi 89092565 ref ZP_01165518.1	Oceanospirillum sp. MED92	E-value = 2.00E-34	Identity = 44.03%
	4	gi 94310685 ref YP_583895.1	Ralstonia metallidurans CH34	E-value = 5.00E-34	Identity = 46.10%
	5	gi 149114586 ref ZP_01841338.1	Shewanella baltica OS223	E-value = 1.00E-33	Identity = 45.10%
AB1147	1	gi 118745541 ref ZP_01593513.1	Geobacter lovleyi SZ	E-value = 1.00E-83	Identity = 36.20%
	2	gi 85859546 ref YP_461747.1	Syntrophus aciditrophicus SB	E-value = 5.00E-81	Identity = 36.01%
	3	gi 108763409 ref YP_632166.1	Myxococcus xanthus DK 1622	E-value = 6.00E-59	Identity = 29.90%
	4	gi 115380096 ref ZP_01467135.1	Stigmatella aurantiaca DW4/3-1	E-value = 2.00E-57	Identity = 31.17%
	5	gi 153005614 ref YP_001379939.1	Anaeromyxobacter sp. Fw109-5	E-value = 9.00E-47	Identity = 28.75%
AB1149	1	gi 153000086 ref YP_001365767.1	Shewanella baltica OS185	E-value = 3.00E-24	Identity = 39.22%
	2	gi 119470649 ref ZP_01613317.1	Alteromonadales bacterium TW-7	E-value = 2.00E-23	Identity = 40.79%
	3	gi 126173797 ref YP_001049946.1	Shewanella baltica OS155	E-value = 1.00E-22	Identity = 37.91%
	4	gi 113947251 ref ZP_01432917.1	Shewanella baltica OS195	E-value = 2.00E-22	Identity = 37.25%
	5	gi 114048098 ref YP_738648.1	Shewanella sp. MR-7	E-value = 3.00E-22	Identity = 39.01%
AB1150	1	torC gi 154173943 ref YP_001408191.1	Campylobacter curvus 525.92	E-value = 5.00E-37	Identity = 38.07%
	2	gi 157165180 ref YP_001466955.1	Campylobacter concisus 13826	E-value = 2.00E-34	Identity = 36.98%
	3	gi 32266450 ref NP_860482.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-31	Identity = 38.58%
	4	gi 57168334 ref ZP_00367468.1	Campylobacter coli RM2228	E-value = 4.00E-31	Identity = 35.60%
	5	gi 154174167 ref YP_001408194.1	Campylobacter curvus 525.92	E-value = 6.00E-31	Identity = 36.60%
AB1151	1	bisC gi 154148302 ref YP_001407047.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 63.72%
	2	gi 154174303 ref YP_001408193.1	Campylobacter curvus 525.92	E-value = 0	Identity = 61.77%
	3	gi 32266449 ref NP_860481.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 62.73%
	4	gi 57168333 ref ZP_00367467.1	Campylobacter coli RM2228	E-value = 0	Identity = 61.98%
	5	gi 88597385 ref ZP_01100620.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 0	Identity = 62.46%
AB1152	1	gi 145235651 ref XP_001390474.1	Aspergillus niger	E-value = 2.00E-51	Identity = 38.02%
	2	gi 146338954 ref YP_001204002.1	Bradyrhizobium sp. ORS278	E-value = 1.00E-49	Identity = 36.17%
	3	gi 115398624 ref XP_001214901.1	Aspergillus terreus NIH2624	E-value = 2.00E-49	Identity = 37.12%
	4	gi 16330234 ref NP_440962.1	Synechocystis sp. PCC 6803	E-value = 1.00E-48	Identity = 37.84%
	5	gi 148253712 ref YP_001238297.1	Bradyrhizobium sp. BTAi1	E-value = 1.00E-47	Identity = 36.23%
AB1153	1	gi 117923855 ref YP_864472.1	Magnetococcus sp. MC-1	E-value = 6.00E-21	Identity = 31.82%
	2	gi 152992524 ref YP_001358245.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-18	Identity = 33.33%
	3	gi 74316500 ref YP_314240.1	Thiobacillus denitrificans ATCC 25259	E-value = 1.00E-16	Identity = 27.60%
	4	gi 120556316 ref YP_960667.1	Marinobacter aquaeolei VT8	E-value = 1.00E-15	Identity = 30.77%
	5	gi 118743704 ref ZP_01591706.1	Geobacter lovleyi SZ	E-value = 2.00E-15	Identity = 30.11%

AB1154	1	<i>mutS2</i>	gi 152991004 ref YP_001356726.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 55.68%
	2		gi 34557825 ref NP_907640.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 50.41%
	3		gi 157165178 ref YP_001467481.1	Campylobacter concisus 13826	E-value = 0	Identity = 52.11%
	4		gi 118475577 ref YP_891800.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 50.61%
	5		gi 154174500 ref YP_001407778.1	Campylobacter curvus 525.92	E-value = 0	Identity = 50.41%
AB1155	1		gi 157165241 ref YP_001467655.1	Campylobacter concisus 13826	E-value = 5.00E-144	Identity = 60.97%
	2		gi 154173896 ref YP_001409039.1	Campylobacter curvus 525.92	E-value = 5.00E-143	Identity = 60.51%
	3		gi 57505732 ref ZP_00371658.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-141	Identity = 58.26%
	4		gi 109948217 ref YP_665445.1	Helicobacter acinonychis str. Sheeba	E-value = 3.00E-139	Identity = 57.66%
	5		gi 108563848 ref YP_628164.1	Helicobacter pylori HPAG1	E-value = 2.00E-138	Identity = 58.03%
AB1156	1			<b>*** No matches found ***</b>		
AB1157	1		gi 154148646 ref YP_001406906.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-53	Identity = 26.27%
	2		gi 118474146 ref YP_891514.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-49	Identity = 27.85%
AB1158	1	<i>dapE</i>	gi 78777642 ref YP_393957.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-130	Identity = 63.11%
	2		gi 152990981 ref YP_001356703.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-126	Identity = 60.38%
	3		gi 149195290 ref ZP_01872378.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-123	Identity = 61.48%
	4		gi 152992085 ref YP_001357806.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-121	Identity = 58.47%
	5		gi 57240564 ref ZP_00368513.1	Campylobacter lari RM2100	E-value = 4.00E-117	Identity = 55.74%
AB1159	1	<i>amtB</i>	gi 152993224 ref YP_001358945.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-134	Identity = 69.23%
	2		gi 149195056 ref ZP_01872148.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-127	Identity = 62.09%
	3		gi 152990241 ref YP_001355963.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-124	Identity = 61.69%
	4		gi 121542175 ref ZP_01673911.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 1.00E-102	Identity = 49.66%
	5		gi 78776840 ref YP_393155.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-96	Identity = 49.20%
AB1160	1	<i>glnB2</i>	gi 152990242 ref YP_001355964.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-35	Identity = 75.00%
	2		gi 52424481 ref YP_087618.1	Mannheimia succiniciproducens MBEL55E	E-value = 1.00E-34	Identity = 64.29%
	3		gi 42629799 ref ZP_00155344.1	Haemophilus influenzae R2846	E-value = 3.00E-34	Identity = 66.07%
	4		gi 152991172 ref YP_001356894.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-34	Identity = 73.21%
	5		gi 124871885 gb EAY63601.1	Burkholderia cenocepacia PC184	E-value = 5.00E-34	Identity = 66.07%
AB1161	1	<i>pssA</i>	gi 78777958 ref YP_394273.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-44	Identity = 55.98%
	2		gi 152993792 ref YP_001359513.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-40	Identity = 50.55%
	3		gi 30019131 ref NP_830762.1	Bacillus cereus ATCC 14579	E-value = 2.00E-13	Identity = 31.21%
	4		gi 75761825 ref ZP_00741756.1	Bacillus thuringiensis serovar israelensis ATCC 35646	E-value = 3.00E-13	Identity = 30.06%
	5		gi 52144363 ref YP_082466.1	Bacillus cereus E33L	E-value = 6.00E-13	Identity = 29.48%
AB1162	1		gi 152993409 ref YP_001359130.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-50	Identity = 39.66%
	2		gi 149193841 ref ZP_01870939.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-49	Identity = 40.68%
	3		gi 34556556 ref NP_906371.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-39	Identity = 37.21%
	4		gi 152990556 ref YP_001356278.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-38	Identity = 36.18%
	5		gi 154175174 ref YP_001408343.1	Campylobacter curvus 525.92	E-value = 3.00E-32	Identity = 33.33%
AB1163	1			<b>*** No matches found ***</b>		
AB1164	1	<i>ilvI</i>	gi 152993406 ref YP_001359127.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 67.32%
	2		gi 78777339 ref YP_393654.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 66.37%
	3		gi 152990557 ref YP_001356279.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 66.61%
	4		gi 32266363 ref NP_860395.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 63.59%
	5		gi 157163882 ref YP_001466735.1	Campylobacter concisus 13826	E-value = 0	Identity = 63.41%
AB1165	1	<i>ilvH</i>	gi 152990558 ref YP_001356280.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-42	Identity = 56.58%
	2		gi 34556554 ref NP_906369.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-40	Identity = 52.29%
	3		gi 118475062 ref YP_891992.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-40	Identity = 58.94%
	4		gi 149193839 ref ZP_01870937.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-39	Identity = 56.58%
	5		gi 78777338 ref YP_393653.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-38	Identity = 55.48%

AB1166	1	<i>lpxD</i>	gi 152990559 ref YP_001356281.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-97	Identity = 57.73%
			gi 78777336 ref YP_393651.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-90	Identity = 55.06%
			gi 149193838 ref ZP_01870936.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-90	Identity = 57.01%
			gi 152993404 ref YP_001359125.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-87	Identity = 52.87%
			gi 34556553 ref NP_906368.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-81	Identity = 49.05%
AB1167	1	<i>ftsK</i>	gi 152990573 ref YP_001356295.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 59.3%
			gi 154175516 ref YP_001408168.1	Campylobacter curvus 525.92	E-value = 0	Identity = 61.3%
			gi 118474833 ref YP_891859.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 58.89%
			gi 78777236 ref YP_393551.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 58%
			gi 149194323 ref ZP_01871420.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 61.78%
AB1168	1		gi 118474546 ref YP_891938.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-57	Identity = 55.56%
			gi 154149077 ref YP_001406703.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-57	Identity = 52.65%
			gi 154174499 ref YP_001407800.1	Campylobacter curvus 525.92	E-value = 1.00E-55	Identity = 52.65%
			gi 157165656 ref YP_001466290.1	Campylobacter concisus 13826	E-value = 2.00E-55	Identity = 52.65%
			gi 154174385 ref YP_001408399.1	Campylobacter curvus 525.92	E-value = 2.00E-55	Identity = 52.65%
AB1169	1		gi 157163989 ref YP_001466291.1	Campylobacter concisus 13826	E-value = 5.00E-44	Identity = 37.26%
			gi 121612247 ref YP_001000938.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 4.00E-41	Identity = 34.55%
			gi 153951530 ref YP_001397648.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 8.00E-41	Identity = 34.88%
			gi 89096578 ref ZP_01169470.1	Bacillus sp. NRRL B-14911	E-value = 1.00E-11	Identity = 25.75%
			gi 118757043 ref ZP_01604810.1	Shewanella pealeana ATCC 700345	E-value = 1.00E-11	Identity = 25.65%
AB1170	1		*** No matches found ***			
AB1171	1		gi 152990263 ref YP_001355985.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-79	Identity = 33.77%
			gi 152993616 ref YP_001359337.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-70	Identity = 31.22%
			gi 95930805 ref ZP_01313537.1	Desulfuromonas acetoxidans DSM 684	E-value = 5.00E-42	Identity = 26.79%
AB1172	1		gi 152990261 ref YP_001355983.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-32	Identity = 38.01%
			gi 152993617 ref YP_001359338.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-31	Identity = 38.22%
			gi 78776815 ref YP_393130.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-29	Identity = 36.18%
			gi 95930806 ref ZP_01313538.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-29	Identity = 34.51%
			gi 34558244 ref NP_908059.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-24	Identity = 31.25%
AB1173	1		gi 153873017 ref ZP_02001742.1	Beggiatoa sp. PS	E-value = 6.00E-14	Identity = 27.75%
AB1174	1		gi 152990261 ref YP_001355983.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-34	Identity = 36.70%
			gi 34558244 ref NP_908059.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-30	Identity = 35.56%
			gi 152993617 ref YP_001359338.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-27	Identity = 36.16%
			gi 78776815 ref YP_393130.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-23	Identity = 28.63%
			gi 95930806 ref ZP_01313538.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-18	Identity = 27.88%
AB1175	1		*** No matches found ***			
AB1176	1		*** No matches found ***			
AB1177	1		*** No matches found ***			
AB1178	1		gi 149193704 ref ZP_01870802.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-21	Identity = 51.49%
			gi 152990602 ref YP_001356324.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-17	Identity = 43.48%
			gi 51893022 ref YP_075713.1	Symbiobacterium thermophilum IAM 14863	E-value = 2.00E-16	Identity = 35.25%
			gi 108760292 ref YP_634638.1	Myxococcus xanthus DK 1622	E-value = 3.00E-16	Identity = 33.33%
			gi 153835180 ref ZP_01987847.1	Vibrio harveyi HY01	E-value = 8.00E-14	Identity = 33.82%
AB1179	1		*** No matches found ***			
AB1180	1		gi 19704777 ref NP_604339.1	Fusobacterium nucleatum subsp. nucleatum ATCC 25586	E-value = 4.00E-172	Identity = 45.58%
			gi 156863268 gb EDO56699.1	Clostridium sp. L2-50	E-value = 4.00E-171	Identity = 40.83%
			gi 34557480 ref NP_907295.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-163	Identity = 47.13%
			gi 119356141 ref YP_910785.1	Chlorobium phaeobacteroides DSM 266	E-value = 8.00E-160	Identity = 36.58%
			gi 67919198 ref ZP_00512783.1	Chlorobium limicola DSM 245	E-value = 4.00E-157	Identity = 36.69%

AB1181	1		<b>*** No matches found ***</b>		
AB1182	1	gi 118475196 ref YP_892233.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-41	Identity = 57.78%
	2	gi 154175401 ref YP_001407984.1	Campylobacter curvus 525.92	E-value = 2.00E-39	Identity = 53.33%
	3	gi 57240447 ref ZP_00368396.1	Campylobacter lari RM2100	E-value = 5.00E-39	Identity = 55.56%
	4	gi 34558446 ref NP_908261.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-38	Identity = 49.44%
	5	gi 157165597 ref YP_001467194.1	Campylobacter concisus 13826	E-value = 1.00E-36	Identity = 51.67%
AB1183	1	<i>engA</i> gi 78776593 ref YP_392908.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-139	Identity = 55.71%
	2	gi 34558325 ref NP_908140.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-131	Identity = 54.79%
	3	gi 152991112 ref YP_001356834.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-130	Identity = 54.98%
	4	gi 118474391 ref YP_892485.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-127	Identity = 52.51%
	5	gi 86151224 ref ZP_01069439.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-127	Identity = 51.99%
AB1184	1	gi 109692194 gb ABG37985.1	Alkalimonas amylytica	E-value = 9.00E-103	Identity = 47.25%
	2	gi 88704869 ref ZP_01102582.1	gamma proteobacterium KT 71	E-value = 8.00E-100	Identity = 44.47%
	3	gi 16331770 ref NP_442498.1	Synechocystis sp. PCC 6803	E-value = 2.00E-99	Identity = 43.60%
	4	gi 119489620 ref ZP_01622380.1	Lyngbya sp. PCC 8106	E-value = 9.00E-98	Identity = 44.91%
	5	gi 78778602 ref YP_396714.1	Prochlorococcus marinus str. MIT 9312	E-value = 3.00E-97	Identity = 43.54%
AB1185	1	<i>hemD</i> gi 152991081 ref YP_001356803.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-38	Identity = 39.90%
	2	gi 34557923 ref NP_907738.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-31	Identity = 34.12%
	3	gi 118474698 ref YP_892418.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-29	Identity = 41.26%
	4	gi 149194573 ref ZP_01871669.1	Caminiabacter mediatlanticus TB-2	E-value = 7.00E-29	Identity = 41.63%
	5	gi 154174614 ref YP_001407816.1	Campylobacter curvus 525.92	E-value = 2.00E-28	Identity = 38.03%
AB1186	1		<b>*** No matches found ***</b>		
AB1187	1	<i>purD</i> gi 78776625 ref YP_392940.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-168	Identity = 68.88%
	2	gi 152991080 ref YP_001356802.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-163	Identity = 67.30%
	3	gi 152993474 ref YP_001359195.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-162	Identity = 67.54%
	4	gi 149193799 ref ZP_01870897.1	Caminiabacter mediatlanticus TB-2	E-value = 2.00E-157	Identity = 66.83%
	5	gi 157163965 ref YP_001467332.1	Campylobacter concisus 13826	E-value = 1.00E-144	Identity = 62.86%
AB1188	1	gi 118474986 ref YP_892416.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-23	Identity = 41.55%
	2	gi 154174671 ref YP_001407818.1	Campylobacter curvus 525.92	E-value = 1.00E-22	Identity = 42.75%
	3	gi 78776626 ref YP_392941.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-17	Identity = 36.23%
	4	gi 34557285 ref NP_907100.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-17	Identity = 35.51%
	5	gi 57168153 ref ZP_00367292.1	Campylobacter coli RM2228	E-value = 7.00E-16	Identity = 34.06%
AB1189	1	gi 154147997 ref YP_001405841.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-85	Identity = 31.95%
	2	gi 154175010 ref YP_001407819.1	Campylobacter curvus 525.92	E-value = 4.00E-82	Identity = 31.93%
	3	gi 118474176 ref YP_892415.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-81	Identity = 30.28%
	4	gi 121612176 ref YP_001000928.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 4.00E-80	Identity = 32.31%
	5	gi 57168154 ref ZP_00367293.1	Campylobacter coli RM2228	E-value = 7.00E-80	Identity = 32.50%
AB1190	1	gi 34557288 ref NP_907103.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-41	Identity = 40.74%
	2	gi 118475165 ref YP_892414.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-39	Identity = 41.78%
	3	gi 78776628 ref YP_392943.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-39	Identity = 39.91%
	4	gi 154175508 ref YP_001407820.1	Campylobacter curvus 525.92	E-value = 7.00E-34	Identity = 38.76%
	5	gi 152993470 ref YP_001359191.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-33	Identity = 35.38%
AB1191	1	<i>pnp</i> gi 34557289 ref NP_907104.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 56.77%
	2	gi 152991076 ref YP_001356798.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 57.28%
	3	gi 154174457 ref YP_001407821.1	Campylobacter curvus 525.92	E-value = 0	Identity = 55.03%
	4	gi 157164996 ref YP_001467328.1	Campylobacter concisus 13826	E-value = 0	Identity = 54.84%
	5	gi 15792577 ref NP_282400.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 0	Identity = 55.54%
AB1192	1	<i>cheY1</i> gi 121998947 ref YP_001003734.1	Halorhodospira halophila SL1	E-value = 1.00E-30	Identity = 60.00%
	2	gi 152982726 ref YP_001353786.1	Janthinobacterium sp. Marseille	E-value = 2.00E-29	Identity = 61.54%

	3	gi 149908621 ref ZP_01897283.1	Moritella sp. PE36	E-value = 4.00E-29	Identity = 58.33%
	4	gi 89094274 ref ZP_01167216.1	Oceanospirillum sp. MED92	E-value = 5.00E-29	Identity = 55.00%
	5	gi 134094525 ref YP_001099600.1	Herminiimonas arsenicoxydans	E-value = 1.00E-28	Identity = 59.83%
AB1193	1	<i>cheA</i> gi 37525780 ref NP_929124.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 1.00E-104	Identity = 35.38%
	2	gi 78485953 ref YP_391878.1	Thiomicrospira crunogena XCL-2	E-value = 6.00E-104	Identity = 36.30%
	3	gi 145529 gb AAA23573.1	Escherichia coli	E-value = 2.00E-103	Identity = 35.21%
	4	gi 16129840 ref NP_416402.1	Escherichia coli K12	E-value = 3.00E-103	Identity = 35.21%
	5	gi 157161360 ref YP_001458678.1	Escherichia coli HS	E-value = 5.00E-103	Identity = 35.21%
AB1194	1	<i>cheR</i> gi 34557579 ref NP_907394.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-68	Identity = 49.82%
	2	gi 32265954 ref NP_859986.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-54	Identity = 48.13%
	3	gi 91776284 ref YP_546040.1	Methylobacillus flagellatus KT	E-value = 7.00E-41	Identity = 40.24%
	4	gi 118054234 ref ZP_01522775.1	Comamonas testosteroni KF-1	E-value = 3.00E-39	Identity = 36.82%
	5	gi 34498892 ref NP_903107.1	Chromobacterium violaceum ATCC 12472	E-value = 5.00E-39	Identity = 38.25%
AB1195	1	<i>cheD</i> gi 118054235 ref ZP_01522776.1	Comamonas testosteroni KF-1	E-value = 2.00E-20	Identity = 35.26%
	2	gi 121596074 ref YP_987970.1	Acidovorax sp. JS42	E-value = 2.00E-18	Identity = 32.63%
	3	gi 110602187 ref ZP_01390322.1	Geobacter sp. FRC-32	E-value = 1.00E-17	Identity = 31.61%
	4	gi 121609132 ref YP_996939.1	Verminephrobacter eiseniae EF01-2	E-value = 3.00E-17	Identity = 29.85%
	5	gi 21242633 ref NP_642215.1	Xanthomonas axonopodis pv. citri str. 306	E-value = 3.00E-17	Identity = 31.82%
AB1196	1	<i>cheB</i> gi 78485103 ref YP_391028.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-72	Identity = 42.74%
	2	gi 127511043 ref YP_001092240.1	Shewanella loihica PV-4	E-value = 2.00E-71	Identity = 44.00%
	3	gi 50120627 ref YP_049794.1	Erwinia carotovora subsp. atroseptica SCR11043	E-value = 7.00E-71	Identity = 42.09%
	4	gi 157371220 ref YP_001479209.1	Serratia proteamaculans 568	E-value = 8.00E-71	Identity = 40.91%
	5	gi 118072309 ref ZP_01540499.1	Shewanella woodyi ATCC 51908	E-value = 7.00E-70	Identity = 41.50%
AB1197	1	gi 46580049 ref YP_010857.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 6.00E-14	Identity = 28.83%
	2	gi 120602541 ref YP_966941.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 7.00E-14	Identity = 28.22%
	3	gi 119944262 ref YP_941942.1	Psychromonas ingrahamii 37	E-value = 3.00E-12	Identity = 29.09%
AB1198	1	<i>fsr</i> gi 83718758 ref YP_443145.1	Burkholderia thailandensis E264	E-value = 2.00E-101	Identity = 52.53%
	2	gi 124384439 ref YP_001026418.1	Burkholderia mallei NCTC 10229	E-value = 5.00E-101	Identity = 52.53%
	3	gi 76808590 ref YP_333250.1	Burkholderia pseudomallei 1710b	E-value = 9.00E-101	Identity = 52.27%
	4	gi 53719589 ref YP_108575.1	Burkholderia pseudomallei K96243	E-value = 9.00E-101	Identity = 52.27%
	5	gi 37527689 ref NP_931033.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 8.00E-98	Identity = 53.25%
AB1199	1	<i>xerD</i> gi 34557587 ref NP_907402.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-125	Identity = 64.77%
	2	gi 152990726 ref YP_001356448.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-117	Identity = 62.75%
	3	gi 32267344 ref NP_861376.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-107	Identity = 59.49%
	4	gi 118474094 ref YP_892018.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-102	Identity = 57.59%
	5	gi 154175082 ref YP_001408312.1	Campylobacter curvus 525.92	E-value = 9.00E-100	Identity = 56.73%
AB1200	1	gi 119477635 ref ZP_01617785.1	marine gamma proteobacterium HTCC2143	E-value = 1.00E-16	Identity = 35.96%
	2	gi 94501283 ref ZP_01307804.1	Oceanobacter sp. RED65	E-value = 2.00E-15	Identity = 35.96%
	3	gi 89093277 ref ZP_01166227.1	Oceanospirillum sp. MED92	E-value = 3.00E-14	Identity = 38.10%
	4	gi 78778026 ref YP_394341.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-13	Identity = 39.09%
	5	gi 110833113 ref YP_691972.1	Alcanivorax borkumensis SK2	E-value = 2.00E-11	Identity = 29.41%
AB1201	1		*** No matches found ***		
AB1202	1		*** No matches found ***		
AB1203	1	<i>prfC</i> gi 152993269 ref YP_001358990.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 52.62%
	2	gi 78776911 ref YP_393226.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 55.31%
	3	gi 152990282 ref YP_001356004.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 51.67%
	4	gi 116331236 ref YP_800954.1	Leptospira borgpetersenii serovar Hardjo-bovis JB197	E-value = 3.00E-174	Identity = 50.08%
	5	gi 116328508 ref YP_798228.1	Leptospira borgpetersenii serovar Hardjo-bovis L550	E-value = 8.00E-174	Identity = 50.08%
AB1204	1	<i>hemK</i> gi 78777517 ref YP_393832.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-58	Identity = 43.38%

	2	gi 154173807 ref YP_001408445.1	Campylobacter curvus 525.92	E-value = 2.00E-53	Identity = 45.79%
	3	gi 34556665 ref NP_906480.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-52	Identity = 41.52%
	4	gi 152992202 ref YP_001357923.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-49	Identity = 42.12%
	5	gi 109947073 ref YP_664301.1	Helicobacter acinonychis str. Sheeba	E-value = 5.00E-45	Identity = 44.76%
AB1205	1	hemN1 gi 78777851 ref YP_394166.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-92	Identity = 52.38%
	2	gi 152992050 ref YP_001357771.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-88	Identity = 47.47%
	3	gi 118475057 ref YP_892276.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-82	Identity = 49.01%
	4	gi 152990886 ref YP_001356608.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-82	Identity = 48.18%
AB1206	1	nudH gi 154148889 ref YP_001406558.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-80	Identity = 48.60%
	2	gi 153952382 ref YP_001398179.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 3.00E-51	Identity = 66.03%
	3	gi 15791941 ref NP_281764.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-51	Identity = 66.03%
	4	gi 57238223 ref YP_178696.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 6.00E-51	Identity = 66.03%
	5	gi 152990885 ref YP_001356607.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-50	Identity = 69.28%
AB1207	1	lysC gi 57168183 ref ZP_00367322.1	Campylobacter coli RM2228	E-value = 3.00E-48	Identity = 61.54%
	2	gi 78777847 ref YP_394162.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-147	Identity = 72.10%
	3	gi 152990884 ref YP_001356606.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-143	Identity = 69.73%
	4	gi 149194491 ref ZP_01871587.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-140	Identity = 68.24%
	5	gi 34558039 ref NP_907854.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-136	Identity = 67.99%
AB1208	1	gi 152992052 ref YP_001357773.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-133	Identity = 67.49%
	2	gi 34558040 ref NP_907855.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-43	Identity = 47.25%
	3	gi 157164563 ref YP_001467150.1	Campylobacter concisus 13826	E-value = 2.00E-41	Identity = 47.49%
	4	gi 154174018 ref YP_001408012.1	Campylobacter curvus 525.92	E-value = 2.00E-40	Identity = 46.37%
	5	gi 152992053 ref YP_001357774.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-37	Identity = 41.99%
AB1209	1	holB gi 118474073 ref YP_892273.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-36	Identity = 41.99%
	2	gi 152990882 ref YP_001356604.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-24	Identity = 45.29%
	3	gi 78777845 ref YP_394160.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-23	Identity = 40.56%
	4	gi 57241141 ref ZP_00369088.1	Campylobacter lari RM2100	E-value = 1.00E-22	Identity = 39.63%
	5	gi 157164770 ref YP_001467149.1	Campylobacter concisus 13826	E-value = 5.00E-22	Identity = 43.37%
AB1210	1	folP gi 57168180 ref ZP_00367319.1	Campylobacter coli RM2228	E-value = 2.00E-21	Identity = 39.30%
	2	gi 152992055 ref YP_001357776.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-122	Identity = 57.94%
	3	gi 149194494 ref ZP_01871590.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-120	Identity = 58.96%
	4	gi 78777844 ref YP_394159.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-116	Identity = 57.68%
	5	gi 152990881 ref YP_001356603.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-114	Identity = 56.91%
AB1211	1	gi 34558042 ref NP_907857.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-98	Identity = 48.94%
	2	gi 88704979 ref ZP_01102691.1	gamma proteobacterium KT 71	E-value = 8.00E-39	Identity = 44.38%
	3	gi 120556794 ref YP_961145.1	Marinobacter aquaeolei VT8	E-value = 6.00E-38	Identity = 41.42%
	4	gi 119504628 ref ZP_01626707.1	marine gamma proteobacterium HTCC2080	E-value = 1.00E-35	Identity = 42.24%
	5	gi 90022480 ref YP_528307.1	Saccharophagus degradans 2-40	E-value = 1.00E-35	Identity = 41.57%
AB1212	1	cfa gi 149375649 ref ZP_01893418.1	Marinobacter algicola DG893	E-value = 3.00E-32	Identity = 40.74%
	2	gi 90577748 ref ZP_01233559.1	Vibrio angustum S14	E-value = 2.00E-89	Identity = 43.32%
	3	gi 37679521 ref NP_934130.1	Vibrio vulnificus YJ016	E-value = 2.00E-89	Identity = 44.92%
	4	gi 89073737 ref ZP_01160251.1	Photobacterium sp. SKA34	E-value = 5.00E-89	Identity = 43.05%
	5	gi 27366209 ref NP_761737.1	Vibrio vulnificus CMCP6	E-value = 9.00E-89	Identity = 44.63%
AB1213	1	gi 146306100 ref YP_001186565.1	Pseudomonas mendocina ymp	E-value = 3.00E-88	Identity = 42.29%
	2	gi 89094237 ref ZP_01167179.1	Oceanospirillum sp. MED92	E-value = 2.00E-21	Identity = 30.86%
	3	gi 71083374 ref YP_266093.1	Candidatus Pelagibacter ubique HTCC1062	E-value = 1.00E-20	Identity = 32.79%
	4	gi 113934535 ref ZP_01420435.1	Caulobacter sp. K31	E-value = 3.00E-20	Identity = 28.27%
	5	gi 91762202 ref ZP_01264167.1	Candidatus Pelagibacter ubique HTCC1002	E-value = 5.00E-20	Identity = 33.05%
	6	gi 154252319 ref YP_001413143.1	Parvibaculum lavamentivorans DS-1	E-value = 6.00E-20	Identity = 26.86%

AB1214	1	gi 149374752 ref ZP_01892525.1	Marinobacter algicola DG893	E-value = 8.00E-92	Identity = 43.03%
	2	gi 89094236 ref ZP_01167178.1	Oceanospirillum sp. MED92	E-value = 1.00E-91	Identity = 43.60%
	3	gi 77460960 ref YP_350467.1	Pseudomonas fluorescens PFO-1	E-value = 1.00E-91	Identity = 40.68%
	4	gi 28868333 ref NP_790952.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 2.00E-91	Identity = 40.68%
	5	gi 66044211 ref YP_234052.1	Pseudomonas syringae pv. syringae B728a	E-value = 4.00E-91	Identity = 41.79%
AB1215	1	gi 134096563 ref YP_001101638.1	Herminiimonas arsenicoxydans	E-value = 1.00E-16	Identity = 36.14%
	2	gi 107104203 ref ZP_01368121.1	Pseudomonas aeruginosa PACS2	E-value = 2.00E-15	Identity = 32.39%
	3	gi 77919624 ref YP_357439.1	Pelobacter carbinolicus DSM 2380	E-value = 3.00E-15	Identity = 33.57%
	4	gi 146305548 ref YP_001186013.1	Pseudomonas mendocina ymp	E-value = 4.00E-15	Identity = 31.54%
	5	gi 15600300 ref NP_253794.1	Pseudomonas aeruginosa PAO1	E-value = 5.00E-15	Identity = 32.39%
AB1216	1	gi 83592065 ref YP_425817.1	Rhodospirillum rubrum ATCC 11170	E-value = 2.00E-47	Identity = 30.56%
	2	gi 71906134 ref YP_283721.1	Dechloromonas aromatica RCB	E-value = 9.00E-47	Identity = 34.25%
	3	gi 121604359 ref YP_981688.1	Polaromonas naphthalenivorans CJ2	E-value = 8.00E-39	Identity = 30.52%
	4	gi 148260617 ref YP_001234744.1	Acidiphilium cryptum JF-5	E-value = 1.00E-37	Identity = 27.00%
	5	gi 115423157 emb CAJ49688.1	Bordetella avium 197N	E-value = 4.00E-37	Identity = 26.60%
AB1217	1	gi 145590153 ref YP_001156750.1	Polynucleobacter sp. QLW-P1DMWA-1	E-value = 1.00E-36	Identity = 37.60%
	2	gi 91762199 ref ZP_01264164.1	Candidatus Pelagibacter ubique HTCC1002	E-value = 6.00E-36	Identity = 34.80%
	3	gi 71083377 ref YP_266096.1	Candidatus Pelagibacter ubique HTCC1062	E-value = 6.00E-36	Identity = 34.80%
	4	gi 118589051 ref ZP_01546458.1	Stappia aggregata IAM 12614	E-value = 5.00E-34	Identity = 37.30%
	5	gi 116251744 ref YP_767582.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 9.00E-34	Identity = 37.90%
AB1218	1	tyrA gi 152990155 ref YP_001355877.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-87	Identity = 60.14%
	2	gi 78776858 ref YP_393173.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-76	Identity = 53.99%
	3	gi 152993577 ref YP_001359298.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-75	Identity = 54.17%
	4	gi 149194900 ref ZP_01871994.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-75	Identity = 51.08%
	5	gi 34556783 ref NP_906598.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-69	Identity = 52.12%
AB1219	1	gi 152990156 ref YP_001355878.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-174	Identity = 45.01%
	2	gi 34556784 ref NP_906599.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-167	Identity = 42.67%
	3	gi 32266491 ref NP_860523.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-149	Identity = 39.66%
	4	gi 57168700 ref ZP_00367832.1	Campylobacter coli RM2228	E-value = 5.00E-141	Identity = 38.74%
	5	gi 121612878 ref YP_999853.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 6.00E-141	Identity = 38.78%
AB1220	1	gi 118474940 ref YP_891976.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-159	Identity = 77.75%
	2	gi 157165027 ref YP_001466406.1	Campylobacter concisus 13826	E-value = 6.00E-158	Identity = 76.95%
	3	gi 15791826 ref NP_281649.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-157	Identity = 78.10%
	4	gi 154175395 ref YP_001407962.1	Campylobacter curvus 525.92	E-value = 5.00E-157	Identity = 76.95%
	5	gi 152991101 ref YP_001356823.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-156	Identity = 76.88%
AB1221	1	gi 78776606 ref YP_392921.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-103	Identity = 48.94%
	2	gi 152993499 ref YP_001359220.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-100	Identity = 47.57%
	3	gi 152991100 ref YP_001356822.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-97	Identity = 48.67%
	4	gi 34556786 ref NP_906601.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-95	Identity = 48.05%
	5	gi 32266489 ref NP_860521.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-91	Identity = 46.88%
AB1222	1	gltX2 gi 78777257 ref YP_393572.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-155	Identity = 63.51%
	2	gi 148926546 ref ZP_01810228.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 6.00E-139	Identity = 59.58%
	3	gi 57167845 ref ZP_00366985.1	Campylobacter coli RM2228	E-value = 9.00E-139	Identity = 58.66%
	4	gi 57237686 ref YP_178934.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-138	Identity = 59.12%
	5	gi 86150270 ref ZP_01068497.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 2.00E-138	Identity = 59.35%
AB1223	1	gi 152990547 ref YP_001356269.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-15	Identity = 60.67%
	2	gi 149193751 ref ZP_01870849.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-14	Identity = 58.62%
	3	gi 154174516 ref YP_001407922.1	Campylobacter curvus 525.92	E-value = 1.00E-13	Identity = 55.56%
	4	gi 34556711 ref NP_906526.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-13	Identity = 55.56%



	5	gi 152992728 ref YP_001358449.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-13	Identity = 58.82%
AB1225	1	gi 32266079 ref NP_860111.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-67	Identity = 32.89%
	2	gi 34556710 ref NP_906525.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-66	Identity = 33.08%
	3	gi 154174437 ref YP_001407921.1	Campylobacter curvus 525.92	E-value = 9.00E-59	Identity = 32.83%
	4	gi 15792181 ref NP_282004.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-56	Identity = 33.93%
	5	gi 118475611 ref YP_891317.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-56	Identity = 30.80%
AB1226	1	gi 152992726 ref YP_001358447.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-06	Identity = 27.11%
AB1227	1	gi 152990544 ref YP_001356266.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-46	Identity = 60.25%
	2	gi 149195306 ref ZP_01872394.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-45	Identity = 59.63%
	3	gi 78777260 ref YP_393575.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-44	Identity = 59.04%
	4	gi 157164895 ref YP_001466421.1	Campylobacter concisus 13826	E-value = 3.00E-42	Identity = 58.02%
	5	gi 152992725 ref YP_001358446.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-42	Identity = 56.10%
AB1228	1	gi 78777261 ref YP_393576.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-101	Identity = 63.44%
	2	gi 152990543 ref YP_001356265.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-94	Identity = 60.57%
	3	gi 152992724 ref YP_001358445.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-94	Identity = 60.42%
	4	gi 34556661 ref NP_906476.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-92	Identity = 57.86%
	5	gi 118475247 ref YP_891969.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-88	Identity = 57.19%
AB1229	1	gi 78777262 ref YP_393577.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-09	Identity = 55.00%
	2	gi 57241193 ref ZP_00369140.1	Campylobacter lari RM2100	E-value = 8.00E-09	Identity = 57.63%
	3	gi 152992723 ref YP_001358444.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-08	Identity = 49.21%
	4	gi 152990542 ref YP_001356264.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-07	Identity = 50.00%
	5	gi 154173673 ref YP_001407917.1	Campylobacter curvus 525.92	E-value = 8.00E-07	Identity = 47.46%
AB1230	1	gi 152992719 ref YP_001358440.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 67.38%
	2	gi 34556660 ref NP_906475.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 65.22%
	3	gi 78777263 ref YP_393578.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 64.74%
	4	gi 152990541 ref YP_001356263.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 67.39%
	5	gi 149195308 ref ZP_01872396.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 62.42%
AB1231	1	gi 152990540 ref YP_001356262.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-27	Identity = 30.99%
	2	gi 78777264 ref YP_393579.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-24	Identity = 29.91%
	3	gi 118474938 ref YP_891972.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-23	Identity = 29.41%
	4	gi 154174953 ref YP_001407915.1	Campylobacter curvus 525.92	E-value = 6.00E-23	Identity = 25.48%
	5	gi 152992718 ref YP_001358439.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-20	Identity = 27.59%
AB1232	1	gi 34556743 ref NP_906558.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-57	Identity = 49.53%
	2	gi 78777294 ref YP_393609.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-57	Identity = 52.58%
	3	gi 152990029 ref YP_001355751.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-52	Identity = 46.26%
	4	gi 152991709 ref YP_001357430.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-47	Identity = 46.76%
	5	gi 149195301 ref ZP_01872389.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-38	Identity = 42.86%
AB1233	1		*** No matches found ***		
AB1234	1		*** No matches found ***		
AB1235	1	gi 152991046 ref YP_001356768.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 72.49%
	2	gi 152993020 ref YP_001358741.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 72.41%
	3	gi 149194559 ref ZP_01871655.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 69.46%
	4	gi 154174885 ref YP_001407832.1	Campylobacter curvus 525.92	E-value = 0	Identity = 69.44%
	5	gi 157165713 ref YP_001466387.1	Campylobacter concisus 13826	E-value = 0	Identity = 69.46%
AB1236	1	gi 152993018 ref YP_001358739.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 71.54%
	2	gi 57240611 ref ZP_00368560.1	Campylobacter lari RM2100	E-value = 0	Identity = 69.62%
	3	gi 118474992 ref YP_892449.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 69.94%
	4	gi 157165286 ref YP_001466388.1	Campylobacter concisus 13826	E-value = 0	Identity = 68.64%
	5	gi 154174492 ref YP_001407833.1	Campylobacter curvus 525.92	E-value = 0	Identity = 69.22%

AB1237	1	<i>ribAB</i>	gi 78777387 ref YP_393702.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-112	Identity = 61.40%
	2		gi 152990431 ref YP_001356153.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-109	Identity = 58.58%
	3		gi 8928299 sp O68249 RIBB_DEHMU	Dehalospirillum multivorans	E-value = 4.00E-105	Identity = 56.64%
	4		gi 152992732 ref YP_001358453.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-103	Identity = 55.29%
	5		gi 34557588 ref NP_907403.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-94	Identity = 52.35%
AB1238	1	<i>glyS</i>	gi 152990481 ref YP_001356203.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 56.57%
	2		gi 78777189 ref YP_393504.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 54.98%
	3		gi 152993287 ref YP_001359008.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 53.23%
	4		gi 34556652 ref NP_906467.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 51.32%
	5		gi 154173823 ref YP_001408091.1	Campylobacter curvus 525.92	E-value = 0	Identity = 51.1%
AB1239	1			<b>*** No matches found ***</b>		
AB1240	1		gi 152990105 ref YP_001355827.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-13	Identity = 38.26%
	2		gi 154175457 ref YP_001408665.1	Campylobacter curvus 525.92	E-value = 3.00E-12	Identity = 38.98%
	3		gi 157165160 ref YP_001466521.1	Campylobacter concisus 13826	E-value = 4.00E-11	Identity = 38.46%
	4		gi 78776582 ref YP_392897.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-10	Identity = 33.06%
	5		gi 153951374 ref YP_001398236.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-09	Identity = 38.14%
AB1241	1		gi 78776583 ref YP_392898.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-08	Identity = 50.00%
	2		gi 152990106 ref YP_001355828.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-07	Identity = 50.75%
AB1242	1	<i>gidB</i>	gi 152993652 ref YP_001359373.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-38	Identity = 47.62%
	2		gi 34557261 ref NP_907076.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-35	Identity = 41.67%
	3		gi 152990107 ref YP_001355829.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-32	Identity = 43.43%
	4		gi 78776584 ref YP_392899.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-31	Identity = 41.40%
	5		gi 149194230 ref ZP_01871327.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-30	Identity = 47.37%
AB1243	1	<i>ribA</i>	gi 152993665 ref YP_001359386.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-57	Identity = 59.49%
	2		gi 78776585 ref YP_392900.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-56	Identity = 57.07%
	3		gi 152990108 ref YP_001355830.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-56	Identity = 57.07%
	4		gi 154175373 ref YP_001408662.1	Campylobacter curvus 525.92	E-value = 6.00E-56	Identity = 58.12%
	5		gi 118474145 ref YP_892708.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-55	Identity = 57.81%
AB1244	1	<i>hemB</i>	gi 154173852 ref YP_001408661.1	Campylobacter curvus 525.92	E-value = 4.00E-143	Identity = 74.92%
	2		gi 154148310 ref YP_001407210.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-142	Identity = 74.30%
	3		gi 152990109 ref YP_001355831.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-142	Identity = 74.77%
	4		gi 157164906 ref YP_001466525.1	Campylobacter concisus 13826	E-value = 4.00E-141	Identity = 73.60%
	5		gi 78776586 ref YP_392901.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-141	Identity = 73.07%
AB1245	1		gi 78777441 ref YP_393756.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-87	Identity = 49.25%
	2		gi 154173641 ref YP_001407572.1	Campylobacter curvus 525.92	E-value = 1.00E-82	Identity = 46.70%
	3		gi 152991361 ref YP_001357083.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-80	Identity = 43.69%
	4		gi 118475391 ref YP_891578.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-79	Identity = 46.52%
	5		gi 154147923 ref YP_001406912.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-71	Identity = 42.68%
AB1246	1		gi 78777440 ref YP_393755.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-42	Identity = 51.58%
	2		gi 118475245 ref YP_891579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-38	Identity = 45.41%
	3		gi 86152014 ref ZP_01070227.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-36	Identity = 46.58%
	4		gi 86152639 ref ZP_01070844.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-36	Identity = 46.58%
	5		gi 15792806 ref NP_282629.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-36	Identity = 46.12%
AB1247	1		gi 154173832 ref YP_001407349.1	Campylobacter curvus 525.92	E-value = 5.00E-53	Identity = 46.22%
	2		gi 78777438 ref YP_393753.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-49	Identity = 53.93%
	3		gi 152991853 ref YP_001357574.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-48	Identity = 46.33%
	4		gi 149194702 ref ZP_01871797.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-46	Identity = 46.46%
	5		gi 157163946 ref YP_001467812.1	Campylobacter concisus 13826	E-value = 6.00E-45	Identity = 43.81%
AB1248	1		gi 118474776 ref YP_891233.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-10	Identity = 69.39%

	2	gi 152991852 ref YP_001357573.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-09	Identity = 69.23%
	3	gi 146301795 ref YP_001196386.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-08	Identity = 80.95%
	4	gi 154173656 ref YP_001409072.1	Campylobacter curvus 525.92	E-value = 4.00E-08	Identity = 63.27%
	5	gi 152991510 ref YP_001357232.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-08	Identity = 66.67%
AB1249	1	<i>nrdD</i> gi 78777437 ref YP_393752.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 79.08%
	2	gi 34557096 ref NP_906911.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 73.88%
	3	gi 152991850 ref YP_001357571.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 74.57%
	4	gi 152991511 ref YP_001357233.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 73.39%
AB1250	1	<i>argF</i> gi 154175399 ref YP_001407350.1	Campylobacter curvus 525.92	E-value = 0	Identity = 71.53%
	2	gi 152993667 ref YP_001359388.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-127	Identity = 74.01%
	3	gi 152990110 ref YP_001355832.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-127	Identity = 74.03%
	4	gi 34558060 ref NP_907875.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-120	Identity = 69.61%
	5	gi 78776587 ref YP_392902.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-117	Identity = 68.08%
AB1251	1	<i>hemN2</i> gi 118474198 ref YP_892706.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-114	Identity = 66.99%
	2	gi 152990113 ref YP_001355835.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 67.25%
	3	gi 78776805 ref YP_393120.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-173	Identity = 63.96%
	4	gi 152993668 ref YP_001359389.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-172	Identity = 64.98%
	5	gi 157164719 ref YP_001466528.1	Campylobacter concisus 13826	E-value = 2.00E-170	Identity = 63.96%
AB1252	1	gi 154174680 ref YP_001408658.1	Campylobacter curvus 525.92	E-value = 5.00E-170	Identity = 62.86%
AB1253	1		*** No matches found ***		
AB1254	1	<i>lpxK</i> gi 32266508 ref NP_860540.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-64	Identity = 46.10%
	2	gi 154174985 ref YP_001408053.1	Campylobacter curvus 525.92	E-value = 2.00E-60	Identity = 42.96%
	3	gi 109947533 ref YP_664761.1	Helicobacter acinonychis str. Sheeba	E-value = 9.00E-59	Identity = 46.43%
	4	gi 78777051 ref YP_393366.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-58	Identity = 46.83%
	5	gi 15644956 ref NP_207126.1	Helicobacter pylori 26695	E-value = 6.00E-58	Identity = 45.45%
AB1255	1	gi 152990789 ref YP_001356511.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-106	Identity = 53.46%
	2	gi 34556648 ref NP_906463.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-102	Identity = 50.40%
	3	gi 118474790 ref YP_892240.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-99	Identity = 48.94%
	4	gi 157164603 ref YP_001467121.1	Campylobacter concisus 13826	E-value = 5.00E-94	Identity = 49.33%
	5	gi 154175374 ref YP_001408054.1	Campylobacter curvus 525.92	E-value = 2.00E-93	Identity = 48.94%
AB1256	1	<i>nadE</i> gi 149194281 ref ZP_01871378.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-70	Identity = 56.22%
	2	gi 78777049 ref YP_393364.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-69	Identity = 53.39%
	3	gi 34556649 ref NP_906464.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-64	Identity = 52.70%
	4	gi 39995758 ref NP_951709.1	Geobacter sulfurreducens PCA	E-value = 1.00E-63	Identity = 48.37%
	5	gi 148265774 ref YP_001232480.1	Geobacter uraniumreducens Rf4	E-value = 3.00E-63	Identity = 48.78%
AB1257	1		*** No matches found ***		
AB1258	1		*** No matches found ***		
AB1259	1	gi 78776598 ref YP_392913.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-36	Identity = 39.11%
	2	gi 154173810 ref YP_001408429.1	Campylobacter curvus 525.92	E-value = 2.00E-29	Identity = 37.56%
	3	gi 157165606 ref YP_001466653.1	Campylobacter concisus 13826	E-value = 9.00E-27	Identity = 35.38%
	4	gi 154148447 ref YP_001406249.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-26	Identity = 34.96%
	5	gi 118474971 ref YP_891747.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-20	Identity = 35.75%
AB1260	1	gi 54297010 ref YP_123379.1	Legionella pneumophila str. Paris	E-value = 3.00E-06	Identity = 33.65%
AB1261	1	gi 154174852 ref YP_001408007.1	Campylobacter curvus 525.92	E-value = 2.00E-14	Identity = 45.53%
	2	gi 154148643 ref YP_001406651.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-09	Identity = 42.86%
	3	gi 152990888 ref YP_001356610.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-09	Identity = 37.70%
	4	gi 78777852 ref YP_394167.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-07	Identity = 42.24%
	5	gi 85711923 ref ZP_01042978.1	Idiomarina baltica OS145	E-value = 2.00E-06	Identity = 32.41%

AB1262	1	<i>tatC</i>	gi 118475065 ref YP_892278.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-76	Identity = 65.31%
	2		gi 152990889 ref YP_00135661.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-74	Identity = 69.79%
	3		gi 154174804 ref YP_001408006.1	Campylobacter curvus 525.92	E-value = 5.00E-73	Identity = 63.27%
	4		gi 34557263 ref NP_907078.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-64	Identity = 65.15%
	5		gi 154148770 ref YP_001406650.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-63	Identity = 59.83%
AB1263	1	<i>queA</i>	gi 152992047 ref YP_001357768.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-119	Identity = 62.76%
	2		gi 152990890 ref YP_001356612.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-116	Identity = 62.94%
	3		gi 149193933 ref ZP_01871031.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-112	Identity = 63.48%
	4		gi 154149256 ref YP_001406649.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-107	Identity = 58.53%
	5		gi 57168187 ref ZP_00367326.1	Campylobacter coli RM2228	E-value = 1.00E-104	Identity = 57.23%
AB1264	1	<i>dnaQ4</i>	gi 152992669 ref YP_001358390.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-85	Identity = 66.94%
	2		gi 78777984 ref YP_394299.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-64	Identity = 52.87%
	3		gi 149195052 ref ZP_01872144.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-45	Identity = 44.26%
	4		gi 78776758 ref YP_393073.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-36	Identity = 36.93%
	5		gi 77980074 ref ZP_00835489.1	Yersinia intermedia ATCC 29909	E-value = 8.00E-25	Identity = 32.24%
AB1265	1		gi 126175882 ref YP_001052031.1	Shewanella baltica OS155	E-value = 5.00E-41	Identity = 45.37%
	2		gi 113947099 ref ZP_01432765.1	Shewanella baltica OS195	E-value = 3.00E-40	Identity = 44.91%
	3		gi 152999209 ref YP_001364890.1	Shewanella baltica OS185	E-value = 4.00E-40	Identity = 43.52%
	4		gi 149115184 ref ZP_01841930.1	Shewanella baltica OS223	E-value = 8.00E-40	Identity = 40.24%
	5		gi 53711450 ref YP_097442.1	Bacteroides fragilis YCH46	E-value = 4.00E-37	Identity = 43.83%
AB1266	1	<i>comE</i>	gi 154175464 ref YP_001408498.1	Campylobacter curvus 525.92	E-value = 3.00E-45	Identity = 34.21%
	2		gi 34556789 ref NP_906604.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-44	Identity = 32.17%
	3		gi 57240631 ref ZP_00368580.1	Campylobacter lari RM2100	E-value = 8.00E-44	Identity = 38.11%
	4		gi 152990088 ref YP_001355810.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-43	Identity = 34.00%
	5		gi 152993708 ref YP_001359429.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-41	Identity = 33.60%
AB1267	1			*** No matches found ***		
AB1268	1		gi 148262102 ref YP_001228808.1	Geobacter uraniumreducens Rf4	E-value = 4.00E-174	Identity = 46.60%
	2		gi 50083707 ref YP_045217.1	Acinetobacter sp. ADP1	E-value = 4.00E-173	Identity = 47.70%
	3		gi 152991993 ref YP_001357714.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-170	Identity = 45.53%
	4		gi 120553327 ref YP_957678.1	Marinobacter aquaeolei VT8	E-value = 2.00E-170	Identity = 47.86%
	5		gi 145620400 ref ZP_01776432.1	Geobacter bemidjensis Bem	E-value = 6.00E-170	Identity = 45.38%
AB1269	1			*** No matches found ***		
AB1270	1			*** No matches found ***		
AB1271	1			*** No matches found ***		
AB1272	1	<i>glpC</i>	gi 152993669 ref YP_001359390.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-170	Identity = 64.57%
	2		gi 152990116 ref YP_001355838.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-165	Identity = 63.64%
	3		gi 78776806 ref YP_393121.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-157	Identity = 62.53%
	4		gi 34558057 ref NP_907872.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-150	Identity = 60.09%
	5		gi 118475651 ref YP_892701.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-148	Identity = 59.91%
AB1273	1	<i>lgt</i>	gi 152990119 ref YP_001355841.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-79	Identity = 57.89%
	2		gi 34558394 ref NP_908209.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-79	Identity = 60.55%
	3		gi 57240863 ref ZP_00368811.1	Campylobacter lari RM2100	E-value = 2.00E-74	Identity = 59.83%
	4		gi 154149140 ref YP_001406419.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-74	Identity = 55.13%
	5		gi 118475330 ref YP_891619.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-74	Identity = 55.38%
AB1274	1			*** No matches found ***		
AB1275	1		gi 154173869 ref YP_001407525.1	Campylobacter curvus 525.92	E-value = 9.00E-22	Identity = 32.90%
	2		gi 118474558 ref YP_891350.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-18	Identity = 28.96%
	3		gi 149194353 ref ZP_01871450.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-14	Identity = 29.77%
	4		gi 34558332 ref NP_908147.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-13	Identity = 27.06%

	5	gi 157164839 ref YP_001466181.1	Campylobacter concisus 13826	E-value = 4.00E-11	Identity = 26.52%
AB1276	1	gi 152990932 ref YP_001356654.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 54.13%
	2	gi 34556857 ref NP_906672.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 52.22%
	3	gi 78777442 ref YP_393757.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 53.49%
	4	gi 152992904 ref YP_001358625.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 51.39%
	5	gi 32266816 ref NP_860848.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 48.47%
AB1277	1	gi 52345267 emb CAG30571.1	Streptococcus pyogenes	E-value = 1.00E-51	Identity = 56.90%
	2	gi 75760144 ref ZP_00740204.1	Bacillus thuringiensis serovar israelensis ATCC 35646	E-value = 4.00E-49	Identity = 55.49%
	3	gi 49478854 ref YP_039043.1	Bacillus thuringiensis serovar konkukian str. 97-27	E-value = 5.00E-49	Identity = 53.76%
	4	gi 47567067 ref ZP_00237784.1	Bacillus cereus G9241	E-value = 7.00E-49	Identity = 54.91%
	5	gi 52140509 ref YP_086320.1	Bacillus cereus E33L	E-value = 1.00E-48	Identity = 54.91%
AB1278	1	gi 78776926 ref YP_393241.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-74	Identity = 58.58%
	2	gi 152993256 ref YP_001358977.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-71	Identity = 60.08%
	3	gi 34558211 ref NP_908026.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-65	Identity = 50.21%
	4	gi 86152189 ref ZP_01070401.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-63	Identity = 54.36%
	5	gi 157415084 ref YP_001482340.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-63	Identity = 54.36%
AB1279	1	gi 34556560 ref NP_906375.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-87	Identity = 34.41%
	2	gi 150017350 ref YP_001309604.1	Clostridium beijerinckii NCIMB 8052	E-value = 2.00E-51	Identity = 29.76%
	3	gi 146311190 ref YP_001176264.1	Enterobacter sp. 638	E-value = 8.00E-45	Identity = 28.97%
	4	gi 78223826 ref YP_385573.1	Geobacter metallireducens GS-15	E-value = 3.00E-39	Identity = 25.32%
AB1280	1	gi 118474771 ref YP_892027.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-94	Identity = 72.69%
	2	gi 78777347 ref YP_393662.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-94	Identity = 71.25%
	3	gi 157164499 ref YP_001466828.1	Campylobacter concisus 13826	E-value = 9.00E-94	Identity = 71.25%
	4	gi 154174132 ref YP_001408320.1	Campylobacter curvus 525.92	E-value = 6.00E-92	Identity = 70.00%
	5	gi 34558382 ref NP_908197.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-88	Identity = 67.65%
AB1281	1	gi 78777348 ref YP_393663.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-28	Identity = 50.37%
	2	gi 118475620 ref YP_892026.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-24	Identity = 46.72%
	3	gi 109947486 ref YP_664714.1	Helicobacter acinonychis str. Sheeba	E-value = 5.00E-24	Identity = 47.33%
	4	gi 108563126 ref YP_627442.1	Helicobacter pylori HPAG1	E-value = 6.00E-24	Identity = 48.06%
	5	gi 15611721 ref NP_223372.1	Helicobacter pylori J99	E-value = 7.00E-24	Identity = 48.06%
AB1282	1	gi 152990596 ref YP_001356318.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-93	Identity = 55.80%
	2	gi 152993172 ref YP_001358893.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-91	Identity = 55.45%
	3	gi 149194532 ref ZP_01871628.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-91	Identity = 57.01%
	4	gi 34558380 ref NP_908195.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-84	Identity = 53.73%
	5	gi 78777349 ref YP_393664.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-81	Identity = 50.92%
AB1283	1	gi 78776337 ref YP_392652.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-52	Identity = 39.86%
	2	gi 78778035 ref YP_394350.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-40	Identity = 34.33%
	3	gi 152992341 ref YP_001358062.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-37	Identity = 32.97%
	4	gi 152993221 ref YP_001358942.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-25	Identity = 27.82%
	5	gi 154173719 ref YP_001407872.1	Campylobacter curvus 525.92	E-value = 2.00E-15	Identity = 28.40%
AB1284	1	gi 157414942 ref YP_001482198.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 7.00E-16	Identity = 60.49%
	2	gi 86151691 ref ZP_01069905.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 9.00E-16	Identity = 60.49%
	3	gi 88597127 ref ZP_01100363.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 1.00E-15	Identity = 59.26%
	4	gi 34558439 ref NP_908254.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-15	Identity = 57.69%
	5	gi 57236976 ref YP_178777.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-15	Identity = 59.26%
AB1285	1	gi 152993271 ref YP_001358992.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 78.69%
	2	gi 118474439 ref YP_892017.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-179	Identity = 74.82%
	3	gi 78777570 ref YP_393885.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-178	Identity = 75.12%
	4	gi 57236975 ref YP_178776.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-175	Identity = 73.97%

	5	gi 148926641 ref ZP_01810322.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 1.00E-175	Identity = 73.97%
AB1286	1	dltA gi 115424044 emb CAJ50597.1	Bordetella avium 197N	E-value = 3.00E-98	Identity = 39.59%
	2	gi 33598414 ref NP_886057.1	Bordetella parapertussis 12822	E-value = 3.00E-93	Identity = 38.68%
	3	gi 33593919 ref NP_881563.1	Bordetella pertussis Tohama I	E-value = 4.00E-93	Identity = 38.68%
	4	gi 50122051 ref YP_051218.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 3.00E-91	Identity = 40.79%
	5	gi 37528212 ref NP_931557.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 8.00E-89	Identity = 40.46%
AB1287	1	dltB gi 115424045 emb CAJ50598.1	Bordetella avium 197N	E-value = 5.00E-48	Identity = 38.24%
	2	gi 37528211 ref NP_931556.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 7.00E-42	Identity = 38.53%
	3	gi 50122052 ref YP_051219.1	Erwinia carotovora subsp. atroseptica SCRI1043	E-value = 8.00E-39	Identity = 30.65%
	4	gi 116630358 ref YP_815642.1	Lactobacillus gasseri ATCC 33323	E-value = 8.00E-33	Identity = 31.89%
	5	gi 42519832 ref NP_965762.1	Lactobacillus johnsonii NCC 533	E-value = 4.00E-32	Identity = 32.16%
AB1288	1		*** No matches found ***		
AB1289	1	dltD gi 37528210 ref NP_931555.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 4.00E-18	Identity = 27.21%
AB1290	1	dltC	*** No matches found ***		
AB1291	1	gi 152990076 ref YP_001355798.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-56	Identity = 61.27%
	2	gi 149193930 ref ZP_01871028.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-56	Identity = 62.64%
	3	gi 152993727 ref YP_001359448.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-55	Identity = 61.49%
	4	gi 78777776 ref YP_394091.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-55	Identity = 60.92%
	5	gi 15791601 ref NP_281424.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-45	Identity = 50.85%
AB1292	1	gi 78776632 ref YP_392947.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 78.54%
	2	gi 83645302 ref YP_433737.1	Hahella chejuensis KCTC 2396	E-value = 0	Identity = 77.44%
	3	gi 152995877 ref YP_001340712.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 78.21%
	4	gi 119857761 ref ZP_01639188.1	Pseudomonas putida W619	E-value = 0	Identity = 74.8%
	5	gi 126667859 ref ZP_01738825.1	Marinobacter sp. ELB17	E-value = 0	Identity = 74.6%
AB1293	1	uspA gi 83645303 ref YP_433738.1	Hahella chejuensis KCTC 2396	E-value = 3.00E-54	Identity = 38.57%
	2	gi 57240793 ref ZP_00368741.1	Campylobacter lari RM2100	E-value = 2.00E-52	Identity = 42.14%
	3	gi 88799888 ref ZP_01115460.1	Reinekea sp. MED297	E-value = 2.00E-51	Identity = 37.14%
	4	gi 149374529 ref ZP_01892303.1	Marinobacter algicola DG893	E-value = 8.00E-47	Identity = 34.98%
	5	gi 110834372 ref YP_693231.1	Alcanivorax borkumensis SK2	E-value = 2.00E-46	Identity = 35.34%
AB1295	1	ktrA gi 34557730 ref NP_907545.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-49	Identity = 50.24%
	2	gi 78776729 ref YP_393044.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-38	Identity = 44.86%
	3	gi 15606658 ref NP_214038.1	Aquifex aeolicus VF5	E-value = 2.00E-32	Identity = 38.97%
	4	gi 57240669 ref ZP_00368617.1	Campylobacter lari RM2100	E-value = 5.00E-31	Identity = 42.65%
	5	gi 118474169 ref YP_892770.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-31	Identity = 40.28%
AB1296	1	ktrB gi 34557731 ref NP_907546.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-85	Identity = 45.52%
	2	gi 118475510 ref YP_892769.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-84	Identity = 47.40%
	3	gi 57240670 ref ZP_00368618.1	Campylobacter lari RM2100	E-value = 1.00E-81	Identity = 45.72%
	4	gi 57238333 ref YP_179461.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-80	Identity = 42.99%
	5	gi 153952224 ref YP_001397629.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 5.00E-80	Identity = 42.99%
AB1297	1	kdpE gi 78776730 ref YP_393045.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-86	Identity = 73.89%
	2	gi 153811679 ref ZP_01964347.1	Ruminococcus obeum ATCC 29174	E-value = 7.00E-51	Identity = 46.05%
	3	gi 83623310 ref ZP_00933585.1	Burkholderia mallei JHU	E-value = 2.00E-49	Identity = 42.08%
	4	gi 153854044 ref ZP_01995377.1	Dorea longicatena DSM 13814	E-value = 2.00E-49	Identity = 44.30%
	5	gi 154483201 ref ZP_02025649.1	Eubacterium ventriosum ATCC 27560	E-value = 2.00E-49	Identity = 44.30%
AB1298	1	kdpD gi 145619557 ref ZP_01775605.1	Geobacter bemiidjensis Bem	E-value = 5.00E-41	Identity = 31.96%
	2	gi 124546147 ref ZP_01705263.1	Shewanella putrefaciens 200	E-value = 7.00E-28	Identity = 30.09%
	3	gi 120600811 ref YP_965385.1	Shewanella sp. W3-18-1	E-value = 3.00E-27	Identity = 30.09%
	4	gi 149114035 ref ZP_01840791.1	Shewanella baltica OS223	E-value = 4.00E-27	Identity = 30.84%
	5	gi 126176487 ref YP_001052636.1	Shewanella baltica OS155	E-value = 7.00E-27	Identity = 30.52%

AB1299	1	<i>dut</i>	gi 148925624 ref ZP_01809312.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 4.00E-37	Identity = 40.34%
	2		gi 121612582 ref YP_001001100.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 6.00E-37	Identity = 40.34%
	3		gi 15792768 ref NP_282591.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 8.00E-37	Identity = 40.34%
	4		gi 86151902 ref ZP_01070115.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-36	Identity = 40.34%
	5		gi 57240945 ref ZP_00368893.1	Campylobacter lari RM2100	E-value = 3.00E-36	Identity = 38.75%
AB1300	1	<i>recR</i>	gi 78777482 ref YP_393797.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-58	Identity = 61.05%
	2		gi 152990929 ref YP_001356651.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-56	Identity = 55.79%
	3		gi 152993460 ref YP_001359181.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-54	Identity = 58.20%
	4		gi 118475618 ref YP_892295.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-54	Identity = 57.53%
	5		gi 34557110 ref NP_906925.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-52	Identity = 49.47%
AB1301	1	<i>dnaJ</i>	gi 78777484 ref YP_393799.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-125	Identity = 61.66%
	2		gi 34557109 ref NP_906924.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-122	Identity = 60.00%
	3		gi 152990930 ref YP_001356652.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-117	Identity = 56.84%
	4		gi 32267018 ref NP_861050.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-114	Identity = 57.18%
	5		gi 118474865 ref YP_892292.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.90E-114	Identity = 57.99%
AB1302	1	<i>trpB2</i>	gi 78776941 ref YP_393256.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 77.81%
	2		gi 66356326 ref XP_625304.1	Cryptosporidium parvum Iowa II	E-value = 2.00E-159	Identity = 68.81%
	3		gi 34557127 ref NP_906942.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-158	Identity = 70.60%
	4		gi 67583616 ref XP_665003.1	Cryptosporidium hominis TU502	E-value = 2.00E-156	Identity = 68.86%
	5		gi 153892496 ref ZP_02013395.1	Opiritaceae bacterium TAV2	E-value = 1.00E-154	Identity = 70.84%
AB1303	1			*** No matches found ***		
AB1304	1			*** No matches found ***		
AB1305	1		gi 152990790 ref YP_001356512.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-71	Identity = 47.01%
	2		gi 152993216 ref YP_001358937.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-54	Identity = 46.86%
	3		gi 154173968 ref YP_001408254.1	Campylobacter curvus 525.92	E-value = 3.00E-50	Identity = 45.93%
	4		gi 154148227 ref YP_001406478.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-49	Identity = 44.85%
	5		gi 149195423 ref ZP_01872506.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-46	Identity = 50.24%
AB1306	1		gi 152993217 ref YP_001358938.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-61	Identity = 55.44%
	2		gi 78777048 ref YP_393363.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-56	Identity = 54.84%
	3		gi 152990791 ref YP_001356513.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-56	Identity = 54.92%
	4		gi 57167808 ref ZP_00366948.1	Campylobacter coli RM2228	E-value = 1.00E-55	Identity = 52.53%
	5		gi 157415080 ref YP_001482336.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-53	Identity = 51.01%
AB1307	1		gi 157375319 ref YP_001473919.1	Shewanella sediminis HAW-EB3	E-value = 2.00E-18	Identity = 30.96%
AB1308	1		gi 94499383 ref ZP_01305920.1	Oceanobacter sp. RED65	E-value = 1.00E-14	Identity = 25.00%
AB1309	1		gi 152992198 ref YP_001357919.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-102	Identity = 61.84%
	2		gi 78777046 ref YP_393361.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-99	Identity = 59.41%
	3		gi 152990795 ref YP_001356517.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-89	Identity = 56.45%
	4		gi 154173800 ref YP_001408059.1	Campylobacter curvus 525.92	E-value = 1.00E-85	Identity = 60.80%
	5		gi 34557081 ref NP_906896.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-84	Identity = 59.52%
AB1310	1			*** No matches found ***		
AB1311	1		gi 34558438 ref NP_908253.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 46.04%
	2		gi 34557356 ref NP_907171.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 44.08%
	3		gi 34556815 ref NP_906630.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 43.55%
	4		gi 57241279 ref ZP_00369226.1	Campylobacter lari RM2100	E-value = 0	Identity = 42.76%
	5		gi 121612515 ref YP_999754.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 0	Identity = 42.02%
AB1312	1	<i>pepD</i>	gi 152990306 ref YP_001356028.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-83	Identity = 39.43%
	2		gi 152993391 ref YP_001359112.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-82	Identity = 42.92%
	3		gi 154174402 ref YP_001408064.1	Campylobacter curvus 525.92	E-value = 3.00E-72	Identity = 38.15%
	4		gi 118474505 ref YP_892234.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-71	Identity = 38.82%

5		gi 57505466 ref ZP_00371394.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-65	Identity = 36.85%
AB1313	1		<b>*** No matches found ***</b>		
AB1314	1	gi 57241710 ref ZP_00369655.1	Campylobacter lari RM2100	E-value = 2.00E-45	Identity = 29.17%
	2	gi 154175470 ref YP_001408196.1	Campylobacter curvus 525.92	E-value = 1.00E-44	Identity = 27.75%
	3	gi 118474107 ref YP_892458.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-42	Identity = 27.91%
	4	gi 78485122 ref YP_391047.1	Thiomicrospira crunogena XCL-2	E-value = 3.00E-40	Identity = 27.72%
	5	gi 15889452 ref NP_355133.1	Agrobacterium tumefaciens str. C58	E-value = 5.00E-39	Identity = 25.80%
AB1315	1		<b>*** No matches found ***</b>		
AB1316	1	gi 152990576 ref YP_001356298.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-18	Identity = 34.34%
	2	gi 118475445 ref YP_891765.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-17	Identity = 36.84%
	3	gi 32265815 ref NP_859847.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-17	Identity = 31.79%
	4	gi 34557621 ref NP_907436.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-16	Identity = 32.35%
	5	gi 57167892 ref ZP_00367032.1	Campylobacter coli RM2228	E-value = 6.00E-16	Identity = 32.56%
AB1317	1	gi 154175377 ref YP_001408406.1	Campylobacter curvus 525.92	E-value = 0	Identity = 66.24%
	2	gi 157165105 ref YP_001466674.1	Campylobacter concisus 13826	E-value = 0	Identity = 66.02%
	3	gi 154147932 ref YP_001406499.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 65.72%
	4	gi 34557622 ref NP_907437.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 66.13%
	5	gi 118475233 ref YP_891766.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 65.17%
AB1318	1	gi 34557623 ref NP_907438.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-123	Identity = 56.28%
	2	gi 154148848 ref YP_001406500.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-121	Identity = 56.42%
	3	gi 154174987 ref YP_001408405.1	Campylobacter curvus 525.92	E-value = 6.00E-121	Identity = 57.04%
	4	gi 152990578 ref YP_001356300.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-119	Identity = 55.11%
	5	gi 57240551 ref ZP_00368500.1	Campylobacter lari RM2100	E-value = 7.00E-118	Identity = 54.61%
AB1319	1		<b>*** No matches found ***</b>		
AB1320	1	gi 118475244 ref YP_892097.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-83	Identity = 50.16%
	2	gi 34557446 ref NP_907261.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-81	Identity = 48.04%
	3	gi 78777244 ref YP_393559.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-80	Identity = 45.82%
	4	gi 57167574 ref ZP_00366714.1	Campylobacter coli RM2228	E-value = 5.00E-80	Identity = 48.01%
	5	gi 157414810 ref YP_001482066.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 1.00E-79	Identity = 48.48%
AB1321	1	gi 83309706 ref YP_419970.1	Magnetospirillum magneticum AMB-1	E-value = 0	Identity = 69.7%
	2	gi 119470169 ref ZP_01612935.1	Alteromonadales bacterium TW-7	E-value = 0	Identity = 66.39%
	3	gi 23016634 ref ZP_00056388.1	Magnetospirillum magnetotacticum MS-1	E-value = 0	Identity = 68.75%
	4	gi 110596828 ref ZP_01385118.1	Chlorobium ferrooxidans DSM 13031	E-value = 0	Identity = 66.76%
	5	gi 21396513 dbj BAC00856.1	Chlorobium limicola	E-value = 0	Identity = 66.49%
AB1322	1	gi 149194469 ref ZP_01871565.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-82	Identity = 48.24%
	2	gi 78777246 ref YP_393561.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-82	Identity = 50.97%
	3	gi 152992167 ref YP_001357888.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-81	Identity = 48.72%
	4	gi 152990582 ref YP_001356304.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-78	Identity = 48.06%
	5	gi 34557447 ref NP_907262.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-74	Identity = 47.40%
AB1323	1	gi 78776777 ref YP_393092.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-12	Identity = 51.06%
	2	gi 152992280 ref YP_001358001.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-08	Identity = 50.00%
	3	gi 40890030 pdb 1DWL B	Desulfovibrio vulgaris	E-value = 7.00E-08	Identity = 41.67%
AB1324	1		<b>*** No matches found ***</b>		
AB1325	1	gi 87118708 ref ZP_01074607.1	Marinomonas sp. MED121	E-value = 6.00E-96	Identity = 44.33%
	2	gi 152992771 ref YP_001358492.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-77	Identity = 40.79%
	3	gi 85858632 ref YP_460834.1	Syntrophus aciditrophicus SB	E-value = 2.00E-70	Identity = 37.05%
	4	gi 116748434 ref YP_845121.1	Syntrophobacter fumaroxidans MPOB	E-value = 2.00E-66	Identity = 34.75%
	5	gi 78777293 ref YP_393608.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-61	Identity = 34.68%
AB1326	1	gi 118474753 ref YP_891756.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-06	Identity = 45.95%



AB1327	1	<i>mraW</i>	gi 78776996 ref YP_393311.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-93	Identity = 59.14%
	2		gi 152990774 ref YP_001356496.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-90	Identity = 56.81%
	3		gi 152992227 ref YP_001357948.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-89	Identity = 54.46%
	4		gi 34556618 ref NP_906433.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-86	Identity = 54.61%
	5		gi 154174311 ref YP_001408418.1	Campylobacter curvus 525.92	E-value = 4.00E-84	Identity = 54.75%
AB1328	1		gi 34556920 ref NP_906735.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-48	Identity = 49.47%
	2		gi 152992226 ref YP_001357947.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-45	Identity = 45.79%
	3		gi 78777487 ref YP_393802.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-43	Identity = 49.72%
	4		gi 154174628 ref YP_001408419.1	Campylobacter curvus 525.92	E-value = 2.00E-40	Identity = 46.81%
	5		gi 118475124 ref YP_891758.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-40	Identity = 48.63%
AB1329	1	<i>hup</i>	gi 34556922 ref NP_906737.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-17	Identity = 69.23%
	2		gi 152990572 ref YP_001356294.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-14	Identity = 66.67%
	3		gi 157164945 ref YP_001466788.1	Campylobacter concisus 13826	E-value = 5.00E-14	Identity = 66.67%
	4		gi 58979367 gb AAW83348.1	Campylobacter jejuni	E-value = 8.00E-14	Identity = 67.42%
	5		gi 58979591 gb AAW83460.1	Campylobacter upsaliensis	E-value = 2.00E-13	Identity = 65.88%
AB1330	1		gi 152993984 ref YP_001359705.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-69	Identity = 40.83%
	2		gi 145617646 ref ZP_01773710.1	Geobacter bemidjiensis Bem	E-value = 7.00E-67	Identity = 36.05%
	3		gi 124515059 gb EAY56570.1	Leptospirillum sp. Group II UBA	E-value = 3.00E-65	Identity = 35.91%
	4		gi 77919419 ref YP_357234.1	Pelobacter carbinolicus DSM 2380	E-value = 5.00E-64	Identity = 34.38%
	5		gi 154173928 ref YP_001409117.1	Campylobacter curvus 525.92	E-value = 8.00E-63	Identity = 38.65%
AB1331	1			*** No matches found ***		
AB1332	1			*** No matches found ***		
AB1333	1			*** No matches found ***		
AB1334	1			*** No matches found ***		
AB1335	1		gi 84385563 ref ZP_00988594.1	Vibrio splendidus 12B01	E-value = 1.00E-63	Identity = 40.88%
	2		gi 149190701 ref ZP_01868968.1	Vibrio shilonii AK1	E-value = 5.00E-57	Identity = 38.74%
	3		gi 26991137 ref NP_746562.1	Pseudomonas putida KT2440	E-value = 1.00E-37	Identity = 29.26%
	4		gi 66047741 ref YP_237582.1	Pseudomonas syringae pv. syringae B728a	E-value = 4.00E-34	Identity = 27.13%
AB1336	1			*** No matches found ***		
AB1337	1			*** No matches found ***		
AB1338	1			*** No matches found ***		
AB1339	1			*** No matches found ***		
AB1340	1			*** No matches found ***		
AB1341	1		gi 52425039 ref YP_088176.1	Mannheimia succiniciproducens MBEL55E	E-value = 9.00E-17	Identity = 25.64%
AB1342	1			*** No matches found ***		
AB1343	1			*** No matches found ***		
AB1344	1			*** No matches found ***		
AB1345	1			*** No matches found ***		
AB1346	1			*** No matches found ***		
AB1347	1			*** No matches found ***		
AB1348	1			*** No matches found ***		
AB1349	1			*** No matches found ***		
AB1350	1			*** No matches found ***		
AB1351	1			*** No matches found ***		
AB1352	1		gi 152991425 ref YP_001357147.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-17	Identity = 35.85%
AB1353	1			*** No matches found ***		
AB1354	1			*** No matches found ***		
AB1355	1			*** No matches found ***		
AB1356	1			*** No matches found ***		

AB1357	1		<b>*** No matches found ***</b>		
AB1358	1		<b>*** No matches found ***</b>		
AB1359	1	gi 67941489 ref ZP_00533613.1	Chlorobium phaeobacteroides BS1	E-value = 3.00E-16	Identity = 35.34%
	2	gi 74316354 ref YP_314094.1	Thiobacillus denitrificans ATCC 25259	E-value = 1.00E-15	Identity = 39.23%
	3	gi 82702897 ref YP_412463.1	Nitrosospira multiformis ATCC 25196	E-value = 4.00E-14	Identity = 37.69%
	4	gi 88811720 ref ZP_01126974.1	Nitrococcus mobilis Nb-231	E-value = 7.00E-13	Identity = 29.69%
	5	gi 118579599 ref YP_900849.1	Pelobacter propionicus DSM 2379	E-value = 1.00E-12	Identity = 30.00%
AB1360	1	norB gi 156719025 ref ZP_02060676.1	Hydrogenobaculum sp. Y04AAS1	E-value = 0	Identity = 47.26%
	2	gi 138894315 ref YP_001124768.1	Geobacillus thermodenitrificans NG80-2	E-value = 5.00E-112	Identity = 33.99%
	3	gi 153894661 ref ZP_02015245.1	Halorubrum lacusprofundi ATCC 49239	E-value = 2.00E-111	Identity = 35.51%
	4	gi 126442657 ref YP_001063055.1	Burkholderia pseudomallei 668	E-value = 2.00E-110	Identity = 33.69%
	5	gi 100232639 ref ZP_01333831.1	Burkholderia pseudomallei 406e	E-value = 3.00E-110	Identity = 33.69%
AB1361	1		<b>*** No matches found ***</b>		
AB1362	1	gi 78777053 ref YP_393368.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-47	Identity = 34.25%
	2	gi 149195049 ref ZP_01872141.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-42	Identity = 36.48%
	3	gi 152993286 ref YP_001359007.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-37	Identity = 28.61%
	4	gi 152990482 ref YP_001356204.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-29	Identity = 28.72%
AB1363	1	gi 78776250 ref YP_392565.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-25	Identity = 52.43%
AB1364	1	gi 15641095 ref NP_230727.1	Vibrio cholerae O1 biovar eltor str. N16961	E-value = 5.00E-21	Identity = 47.86%
	2	gi 116217592 ref ZP_01483388.1	Vibrio cholerae RC385	E-value = 3.00E-20	Identity = 47.01%
	3	gi 53717484 ref YP_105425.1	Burkholderia mallei ATCC 23344	E-value = 2.00E-19	Identity = 43.97%
	4	gi 83716053 ref YP_439782.1	Burkholderia thailandensis E264	E-value = 4.00E-19	Identity = 43.10%
	5	gi 76818754 ref YP_337554.1	Burkholderia pseudomallei 1710b	E-value = 7.00E-19	Identity = 43.97%
AB1365	1	gi 78777233 ref YP_393548.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-23	Identity = 35.18%
	2	gi 51245405 ref YP_065289.1	Desulfotalea psychrophila LSv54	E-value = 2.00E-23	Identity = 38.97%
	3	gi 121541499 ref ZP_01673250.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 2.00E-16	Identity = 26.64%
	4	gi 90020042 ref YP_525869.1	Saccharophagus degradans 2-40	E-value = 2.00E-16	Identity = 27.78%
	5	gi 95930997 ref ZP_01313726.1	Desulfuromonas acetoxidans DSM 684	E-value = 9.00E-16	Identity = 28.50%
AB1366	1	gi 78778075 ref YP_394390.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-33	Identity = 32.34%
	2	gi 148265594 ref YP_001232300.1	Geobacter uraniumreducens Rf4	E-value = 8.00E-16	Identity = 25.32%
AB1367	1	cbpA gi 32267141 ref NP_861173.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-87	Identity = 59.93%
	2	gi 78776753 ref YP_393068.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-86	Identity = 63.79%
	3	gi 34557617 ref NP_907432.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-86	Identity = 63.14%
	4	gi 152990700 ref YP_001356422.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-85	Identity = 62.24%
	5	gi 152993148 ref YP_001358869.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-84	Identity = 62.89%
AB1368	1	gi 154173851 ref YP_001408403.1	Campylobacter curvus 525.92	E-value = 4.00E-28	Identity = 56.78%
	2	gi 152990701 ref YP_001356423.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-28	Identity = 57.63%
	3	gi 34557618 ref NP_907433.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-28	Identity = 54.92%
	4	gi 78776754 ref YP_393069.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-27	Identity = 56.91%
	5	gi 152993147 ref YP_001358868.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-27	Identity = 57.89%
AB1369	1	gi 118475276 ref YP_891463.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-71	Identity = 48.75%
	2	gi 154149454 ref YP_001405953.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-59	Identity = 45.48%
	3	gi 146310944 ref YP_0011176018.1	Enterobacter sp. 638	E-value = 3.00E-57	Identity = 39.53%
	4	gi 56414082 ref YP_151157.1	Salmonella enterica subsp. enterica serovar Paratyphi A str. ATCC 9150	E-value = 1.00E-55	Identity = 40.20%
	5	gi 16759739 ref NP_455356.1	Salmonella enterica subsp. enterica serovar Typhi str. CT18	E-value = 1.00E-55	Identity = 40.20%
AB1370	1	gi 116253422 ref YP_769260.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 3.00E-178	Identity = 54.39%
	2	gi 51595555 ref YP_069746.1	Yersinia pseudotuberculosis IP 32953	E-value = 8.00E-176	Identity = 54.47%
	3	gi 86358850 ref YP_470742.1	Rhizobium etli CFN 42	E-value = 2.00E-175	Identity = 54.64%
	4	gi 45440812 ref NP_992351.1	Yersinia pestis biovar Microtus str. 91001	E-value = 2.00E-175	Identity = 54.47%

	5	gi 37525459 ref NP_928803.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 4.00E-175	Identity = 54.56%
AB1371	1	gi 118475223 ref YP_891465.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-94	Identity = 59.67%
	2	gi 116253423 ref YP_769261.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 2.00E-93	Identity = 49.86%
	3	gi 86358851 ref YP_470743.1	Rhizobium etli CFN 42	E-value = 3.00E-92	Identity = 49.86%
	4	gi 110632493 ref YP_672701.1	Mesorhizobium sp. BNC1	E-value = 8.00E-88	Identity = 47.81%
	5	gi 83593126 ref YP_426878.1	Rhodospirillum rubrum ATCC 11170	E-value = 5.00E-87	Identity = 47.54%
AB1372	1	gi 118474271 ref YP_891466.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-92	Identity = 55.74%
	2	gi 16264618 ref NP_437410.1	Sinorhizobium meliloti 1021	E-value = 3.00E-87	Identity = 45.90%
	3	gi 116253424 ref YP_769262.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 3.00E-86	Identity = 45.23%
	4	gi 150376829 ref YP_001313425.1	Sinorhizobium medicae WSM419	E-value = 7.00E-85	Identity = 45.08%
	5	gi 86358852 ref YP_470744.1	Rhizobium etli CFN 42	E-value = 1.00E-84	Identity = 45.90%
AB1373	1	gi 126462873 ref YP_001043987.1	Rhodobacter sphaeroides ATCC 17029	E-value = 4.00E-62	Identity = 39.95%
	2	gi 77464028 ref YP_353532.1	Rhodobacter sphaeroides 2.4.1	E-value = 5.00E-62	Identity = 39.95%
	3	gi 146278415 ref YP_001168574.1	Rhodobacter sphaeroides ATCC 17025	E-value = 2.00E-61	Identity = 42.44%
	4	gi 150376529 ref YP_001313125.1	Sinorhizobium medicae WSM419	E-value = 8.00E-59	Identity = 44.19%
	5	gi 86359171 ref YP_471063.1	Rhizobium etli CFN 42	E-value = 2.00E-58	Identity = 39.03%
AB1374	1 <i>bmQ</i>	gi 145954983 ref ZP_01803987.1	Clostridium difficile QCD-32g58	E-value = 5.00E-83	Identity = 43.33%
	2	gi 126698856 ref YP_001087753.1	Clostridium difficile 630	E-value = 3.00E-82	Identity = 43.10%
	3	gi 145954984 ref ZP_01803988.1	Clostridium difficile QCD-32g58	E-value = 5.00E-79	Identity = 42.76%
	4	gi 126698857 ref YP_001087754.1	Clostridium difficile 630	E-value = 6.00E-79	Identity = 42.52%
	5	gi 110800785 ref YP_694516.1	Clostridium perfringens ATCC 13124	E-value = 4.00E-71	Identity = 39.14%
AB1376	1	gi 15602475 ref NP_245547.1	Pasteurella multocida subsp. multocida str. Pm70	E-value = 3.00E-33	Identity = 39.65%
	2	gi 145636087 ref ZP_01791757.1	Haemophilus influenzae PittHH	E-value = 1.00E-32	Identity = 40.07%
	3	gi 68250107 ref YP_249219.1	Haemophilus influenzae 86-028NP	E-value = 2.00E-32	Identity = 40.42%
	4	gi 148825914 ref YP_001290667.1	Haemophilus influenzae PittEE	E-value = 2.00E-32	Identity = 40.07%
	5	gi 46133444 ref ZP_00157214.2	Haemophilus influenzae R2866	E-value = 2.00E-32	Identity = 40.42%
AB1377	1	gi 152990295 ref YP_001356017.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-26	Identity = 48.30%
	2	gi 34558425 ref NP_908240.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-25	Identity = 42.86%
	3	gi 149195151 ref ZP_01872242.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-24	Identity = 52.38%
	4	gi 86151299 ref ZP_01069514.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-23	Identity = 47.55%
	5	gi 15791650 ref NP_281473.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 6.00E-23	Identity = 47.55%
AB1378	1 <i>carB</i>	gi 78777664 ref YP_393979.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 74.13%
	2	gi 152990294 ref YP_001356016.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 73.20%
	3	gi 34558426 ref NP_908241.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 73.46%
	4	gi 149195024 ref ZP_01872117.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 73.44%
	5	gi 152992698 ref YP_001358419.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 72.89%
AB1379	1	gi 118744760 ref ZP_01592748.1	Geobacter lovleyi SZ	E-value = 7.00E-83	Identity = 56.98%
	2	gi 118579415 ref YP_900665.1	Pelobacter propionicus DSM 2379	E-value = 3.00E-76	Identity = 50.96%
	3	gi 78224046 ref YP_385793.1	Geobacter metallireducens GS-15	E-value = 8.00E-74	Identity = 54.89%
	4	gi 39995765 ref NP_951716.1	Geobacter sulfurreducens PCA	E-value = 7.00E-69	Identity = 51.50%
	5	gi 15613420 ref NP_241723.1	Bacillus halodurans C-125	E-value = 4.00E-66	Identity = 53.18%
AB1380	1 <i>nhaA1</i>	gi 34557615 ref NP_907430.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-97	Identity = 47.53%
	2	gi 32267144 ref NP_861176.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-90	Identity = 45.67%
	3	gi 108563926 ref YP_628242.1	Helicobacter pylori HPAG1	E-value = 7.00E-88	Identity = 47.97%
	4	gi 15612512 ref NP_224165.1	Helicobacter pylori J99	E-value = 3.00E-86	Identity = 47.02%
	5	gi 15646159 ref NP_208343.1	Helicobacter pylori 26695	E-value = 1.00E-85	Identity = 47.49%
AB1381	1		*** No matches found ***		
AB1382	1 <i>metX</i>	gi 118474380 ref YP_891789.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-131	Identity = 60.93%
	2	gi 157165371 ref YP_001467502.1	Campylobacter concisus 13826	E-value = 1.00E-129	Identity = 59.56%

	3	gi 152993373 ref YP_001359094.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-128	Identity = 58.74%
	4	gi 152991019 ref YP_001356741.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-127	Identity = 60.22%
	5	gi 154148628 ref YP_001406471.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-125	Identity = 61.06%
AB1383	1	gi 34557008 ref NP_906823.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-157	Identity = 44.17%
	2	gi 34557768 ref NP_907583.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-140	Identity = 39.75%
	3	gi 119899284 ref YP_934497.1	Azoarcus sp. BH72	E-value = 3.00E-137	Identity = 39.01%
	4	gi 21244223 ref NP_643805.1	Xanthomonas axonopodis pv. citri str. 306	E-value = 2.00E-126	Identity = 38.32%
	5	gi 154174913 ref YP_001408304.1	Campylobacter curvus 525.92	E-value = 7.00E-124	Identity = 40.15%
AB1384	1		*** No matches found ***		
AB1385	1	<i>ftsZ</i> gi 34556673 ref NP_906488.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-82	Identity = 56.97%
	2	gi 154174794 ref YP_001408422.1	Campylobacter curvus 525.92	E-value = 2.00E-81	Identity = 53.85%
	3	gi 152990778 ref YP_001356500.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-80	Identity = 54.65%
	4	gi 57242102 ref ZP_00370042.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-78	Identity = 56.92%
	5	gi 152992210 ref YP_001357931.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-78	Identity = 59.05%
AB1386	1	<i>ftsA</i> gi 34556674 ref NP_906489.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-80	Identity = 42.86%
	2	gi 154174212 ref YP_001408421.1	Campylobacter curvus 525.92	E-value = 5.00E-74	Identity = 39.55%
	3	gi 157165758 ref YP_001466660.1	Campylobacter concisus 13826	E-value = 2.00E-73	Identity = 40.85%
	4	gi 152990777 ref YP_001356499.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-72	Identity = 39.35%
	5	gi 152992211 ref YP_001357932.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-72	Identity = 40.25%
AB1387	1	gi 152990776 ref YP_001356498.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-77	Identity = 37.94%
	2	gi 157164574 ref YP_001466661.1	Campylobacter concisus 13826	E-value = 2.00E-73	Identity = 34.09%
	3	gi 118475291 ref YP_891759.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-70	Identity = 36.01%
	4	gi 154175271 ref YP_001408420.1	Campylobacter curvus 525.92	E-value = 6.00E-70	Identity = 33.06%
	5	gi 78777490 ref YP_393805.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-68	Identity = 36.68%
AB1388	1	<i>recD</i> gi 78778046 ref YP_394361.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 47.73%
	2	gi 118577405 ref YP_899645.1	Pelobacter propionicus DSM 2379	E-value = 1.00E-112	Identity = 35.94%
	3	gi 46446323 ref YP_007688.1	Candidatus Protochlamydia amoebophila UWE25	E-value = 2.00E-74	Identity = 28.86%
	4	gi 68553218 ref ZP_00592597.1	Prosthecochloris aestuarii DSM 271	E-value = 3.00E-74	Identity = 29.00%
	5	gi 125974734 ref YP_001038644.1	Clostridium thermocellum ATCC 27405	E-value = 1.00E-72	Identity = 29.77%
AB1389	1	gi 154149139 ref YP_001406454.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-06	Identity = 42.20%
AB1391	1	gi 18645103 gb AAL76404.1	uncultured proteobacterium	E-value = 7.00E-24	Identity = 53.04%
	2	gi 119504070 ref ZP_01626151.1	marine gamma proteobacterium HTCC2080	E-value = 1.00E-23	Identity = 52.17%
	3	gi 146308011 ref YP_001188476.1	Pseudomonas mendocina ymp	E-value = 1.00E-23	Identity = 54.31%
	4	gi 78776350 ref YP_392665.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-23	Identity = 53.45%
	5	gi 40063507 gb AAR38307.1	uncultured bacterium 581	E-value = 2.00E-23	Identity = 52.17%
AB1392	1		*** No matches found ***		
AB1393	1	gi 57505939 ref ZP_00371863.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-12	Identity = 48.91%
	2	gi 78777011 ref YP_393326.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-07	Identity = 39.78%
AB1394	1	gi 57505940 ref ZP_00371864.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-07	Identity = 47.14%
AB1395	1	gi 57241050 ref ZP_00368997.1	Campylobacter lari RM2100	E-value = 1.00E-14	Identity = 25.59%
	2	gi 57237690 ref YP_178938.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 5.00E-11	Identity = 25.56%
	3	gi 86150273 ref ZP_01068500.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 1.00E-10	Identity = 25.69%
	4	gi 15792187 ref NP_282010.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-10	Identity = 25.69%
	5	gi 86152182 ref ZP_01070394.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-10	Identity = 25.75%
AB1396	1	gi 78776339 ref YP_392654.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-18	Identity = 59.76%
	2	gi 15792186 ref NP_282009.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-18	Identity = 59.09%
	3	gi 57167848 ref ZP_00366988.1	Campylobacter coli RM2228	E-value = 1.00E-17	Identity = 59.76%
	4	gi 153952619 ref YP_001398106.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-17	Identity = 59.09%
	5	gi 57505499 ref ZP_00371427.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-16	Identity = 59.30%

AB1397	1	gi 78776344 ref YP_392659.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 61.97%
	2	gi 152993399 ref YP_001359120.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-176	Identity = 60.33%
	3	gi 121542511 ref ZP_01674237.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 2.00E-142	Identity = 46.79%
	4	gi 116327458 ref YP_797178.1	Leptospira borgpetersenii serovar Hardjo-ovis L550	E-value = 2.00E-136	Identity = 51.51%
	5	gi 24215872 ref NP_713353.1	Leptospira interrogans serovar Lai str. 56601	E-value = 2.00E-136	Identity = 52.42%
AB1398	1	gi 117621019 ref YP_858283.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 2.00E-44	Identity = 53.25%
	2	gi 145297538 ref YP_001140379.1	Aeromonas salmonicida subsp. salmonicida A449	E-value = 3.00E-44	Identity = 53.25%
	3	gi 145297526 ref YP_001140367.1	Aeromonas salmonicida subsp. salmonicida A449	E-value = 1.00E-43	Identity = 52.66%
	4	gi 91206311 ref YP_538665.1	Escherichia coli UTI89	E-value = 1.00E-42	Identity = 53.85%
	5	gi 149276822 ref ZP_01882965.1	Pedobacter sp. BAL39	E-value = 2.00E-42	Identity = 53.33%
AB1399	1	gi 152993174 ref YP_001358895.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-142	Identity = 65.23%
	2	gi 78777291 ref YP_393606.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-140	Identity = 61.83%
	3	gi 149194807 ref ZP_01871901.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-136	Identity = 61.89%
	4	gi 152991384 ref YP_001357106.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-136	Identity = 61.71%
	5	gi 57504883 ref ZP_00370858.1	Campylobacter coli RM2228	E-value = 5.00E-116	Identity = 54.96%
AB1400	1	gi 153954815 ref YP_001395580.1	Clostridium kluyveri DSM 555	E-value = 0	Identity = 54.02%
	2	gi 91776082 ref YP_545838.1	Methylobacillus flagellatus KT	E-value = 0	Identity = 50.99%
	3	gi 126356759 ref ZP_01713763.1	Pseudomonas putida GB-1	E-value = 8.00E-179	Identity = 44.97%
	4	gi 119857090 ref ZP_01638520.1	Pseudomonas putida W619	E-value = 9.00E-178	Identity = 44.99%
	5	gi 26988777 ref NP_744202.1	Pseudomonas putida KT2440	E-value = 5.00E-175	Identity = 44.19%
AB1401	1		*** No matches found ***		
AB1403	1	gi 152990085 ref YP_001355807.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-167	Identity = 46.74%
	2	gi 78776569 ref YP_392884.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-160	Identity = 46.67%
	3	gi 154175169 ref YP_001408495.1	Campylobacter curvus 525.92	E-value = 4.00E-153	Identity = 43.96%
	4	gi 57236987 ref YP_178788.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 7.00E-151	Identity = 46.00%
	5	gi 15792033 ref NP_281856.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-151	Identity = 46.17%
AB1404	1		*** No matches found ***		
AB1405	1		*** No matches found ***		
AB1406	1		*** No matches found ***		
AB1407	1		*** No matches found ***		
AB1408	1	gi 78777621 ref YP_393936.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-32	Identity = 65.49%
	2	gi 149194372 ref ZP_01871469.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-30	Identity = 61.06%
	3	gi 113949958 ref ZP_01435598.1	Shewanella baltica OS195	E-value = 2.00E-28	Identity = 59.29%
	4	gi 149116397 ref ZP_01843123.1	Shewanella baltica OS223	E-value = 5.00E-28	Identity = 58.41%
	5	gi 126174105 ref YP_001050254.1	Shewanella baltica OS155	E-value = 9.00E-28	Identity = 58.41%
AB1409	1	gi 78777623 ref YP_393938.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-145	Identity = 77.11%
	2	gi 152993232 ref YP_001358953.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-130	Identity = 69.88%
	3	gi 90578808 ref ZP_01234618.1	Vibrio angustum S14	E-value = 2.00E-109	Identity = 60.84%
	4	gi 114563283 ref YP_750796.1	Shewanella frigidimarina NCIMB 400	E-value = 5.00E-109	Identity = 58.01%
	5	gi 118756768 ref ZP_01604540.1	Shewanella pealeana ATCC 700345	E-value = 6.00E-108	Identity = 58.01%
AB1410	1	gi 90411066 ref ZP_01219079.1	Photobacterium profundum 3TCK	E-value = 6.00E-25	Identity = 49.11%
	2	gi 54303177 ref YP_133170.1	Photobacterium profundum SS9	E-value = 9.00E-25	Identity = 49.11%
	3	gi 119859817 ref ZP_01641227.1	Pseudomonas putida W619	E-value = 2.00E-23	Identity = 43.48%
	4	gi 115423581 emb CAJ50117.1	Bordetella avium 197N	E-value = 4.00E-22	Identity = 45.13%
	5	gi 89075725 ref ZP_01162120.1	Photobacterium sp. SKA34	E-value = 6.00E-22	Identity = 44.64%
AB1411	1	gi 150016193 ref YP_001308447.1	Clostridium beijerinckii NCIMB 8052	E-value = 1.00E-89	Identity = 60.84%
	2	gi 110800693 ref YP_694838.1	Clostridium perfringens ATCC 13124	E-value = 3.00E-87	Identity = 60.35%
	3	gi 18309375 ref NP_561309.1	Clostridium perfringens str. 13	E-value = 5.00E-86	Identity = 59.65%
	4	gi 153814319 ref ZP_01966987.1	Ruminococcus torques ATCC 27756	E-value = 7.00E-85	Identity = 55.94%

	5	gi 153854863 ref ZP_01996086.1	Dorea longicatena DSM 13814	E-value = 2.00E-83	Identity = 57.34%
AB1412	1	gi 66046953 ref YP_236794.1	Pseudomonas syringae pv. syringae B728a	E-value = 3.00E-43	Identity = 34.34%
	2	gi 28868859 ref NP_791478.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 4.00E-43	Identity = 32.33%
	3	gi 124004104 ref ZP_01688951.1	Microscilla marina ATCC 23134	E-value = 2.00E-40	Identity = 36.67%
	4	gi 34540720 ref NP_905199.1	Porphyromonas gingivalis W83	E-value = 9.00E-37	Identity = 31.44%
	5	gi 86149519 ref ZP_01067749.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 8.00E-29	Identity = 30.83%
AB1413	1	gi 86748716 ref YP_485212.1	Rhodospseudomonas palustris HaA2	E-value = 5.00E-25	Identity = 27.84%
	2	gi 156449125 ref ZP_02055508.1	Methylobacterium chloromethanicum CM4	E-value = 3.00E-24	Identity = 26.43%
	3	gi 77974093 ref ZP_00829636.1	Yersinia frederiksenii ATCC 33641	E-value = 4.00E-24	Identity = 27.08%
	4	gi 118443173 ref YP_877507.1	Clostridium novyi NT	E-value = 2.00E-22	Identity = 29.16%
	5	gi 16120722 ref NP_404035.1	Yersinia pestis CO92	E-value = 2.00E-22	Identity = 26.49%
AB1414	1	hypD gi 152993233 ref YP_001358954.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-154	Identity = 68.60%
	2	gi 78777625 ref YP_393940.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-154	Identity = 69.13%
	3	gi 152990721 ref YP_001356443.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-139	Identity = 63.76%
	4	gi 34557191 ref NP_907006.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-129	Identity = 59.23%
	5	gi 32265821 ref NP_859853.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-127	Identity = 56.38%
AB1415	1	hypC gi 152990720 ref YP_001356442.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-23	Identity = 63.74%
	2	gi 78777626 ref YP_393941.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-20	Identity = 59.57%
	3	gi 78486381 ref YP_392306.1	Thiomicrospira crunogena XCL-2	E-value = 2.00E-17	Identity = 62.82%
	4	gi 118475307 ref YP_892102.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-17	Identity = 58.23%
	5	gi 154148697 ref YP_001406436.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-17	Identity = 61.33%
AB1416	1	hypB gi 152993235 ref YP_001358956.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-99	Identity = 73.99%
	2	gi 78777627 ref YP_393942.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-94	Identity = 72.16%
	3	gi 152990719 ref YP_001356441.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-92	Identity = 68.13%
	4	gi 78486382 ref YP_392307.1	Thiomicrospira crunogena XCL-2	E-value = 4.00E-86	Identity = 70.40%
	5	gi 90578811 ref ZP_01234621.1	Vibrio angustum S14	E-value = 3.00E-85	Identity = 62.92%
AB1417	1	gi 152990717 ref YP_001356439.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-22	Identity = 37.38%
	2	gi 152993237 ref YP_001358958.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-18	Identity = 28.57%
	3	gi 78776259 ref YP_392574.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-16	Identity = 31.46%
	4	gi 149194392 ref ZP_01871489.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-10	Identity = 33.50%
	5	gi 31335179 gb AAP44503.1	Neisseria meningitidis	E-value = 2.00E-06	Identity = 25.71%
AB1418	1		*** No matches found ***		
AB1419	1	gi 154686498 ref YP_001421659.1	Bacillus amyloliquefaciens FZB42	E-value = 6.00E-34	Identity = 30.58%
	2	gi 15894135 ref NP_347484.1	Clostridium acetobutylicum ATCC 824	E-value = 5.00E-33	Identity = 33.70%
	3	gi 78042996 ref YP_359036.1	Carboxydothermus hydrogenoformans Z-2901	E-value = 2.00E-30	Identity = 31.25%
	4	gi 149183114 ref ZP_01861565.1	Bacillus sp. SG-1	E-value = 4.00E-30	Identity = 30.51%
	5	gi 138895765 ref YP_001126218.1	Geobacillus thermodenitrificans NG80-2	E-value = 4.00E-30	Identity = 28.78%
AB1420	1	gi 78777435 ref YP_393750.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-136	Identity = 61.22%
	2	gi 152992758 ref YP_001358479.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-134	Identity = 56.16%
	3	gi 91201475 emb CAJ74535.1	Candidatus Kueneia stuttgartiensis	E-value = 2.00E-63	Identity = 35.61%
	4	gi 150383881 ref ZP_01922593.1	Victivallis vadensis ATCC BAA-548	E-value = 7.00E-63	Identity = 35.29%
	5	gi 126180327 ref YP_001048292.1	Methanoculleus marisnigri JR1	E-value = 2.00E-59	Identity = 34.87%
AB1421	1	gi 78776631 ref YP_392946.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-131	Identity = 70.77%
	2	gi 157369598 ref YP_001477587.1	Serratia proteamaculans 568	E-value = 8.00E-51	Identity = 36.36%
	3	gi 153091046 gb EDN73051.1	Mannheimia haemolytica PHL213	E-value = 4.00E-49	Identity = 37.50%
	4	gi 50085910 ref YP_047420.1	Acinetobacter sp. ADP1	E-value = 1.00E-48	Identity = 35.31%
	5	gi 46143772 ref ZP_00134234.2	Actinobacillus pleuropneumoniae serovar 1 str. 4074	E-value = 4.00E-48	Identity = 38.87%
AB1422	1		*** No matches found ***		
AB1423	1		*** No matches found ***		

AB1424	1	gi 95930514 ref ZP_01313249.1	Desulfuromonas acetoxidans DSM 684	E-value = 1.00E-19	Identity = 32.54%
	2	gi 78776247 ref YP_392562.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-19	Identity = 31.63%
	3	gi 152995597 ref YP_001340432.1	Marinomonas sp. MWYL1	E-value = 6.00E-11	Identity = 25.56%
	4	gi 114561837 ref YP_749350.1	Shewanella frigidimarina NCIMB 400	E-value = 1.00E-10	Identity = 25.93%
	5	gi 88796766 ref ZP_01112417.1	Alteromonas macleodii 'Deep ecotype'	E-value = 3.00E-10	Identity = 25.78%
AB1425	1	gi 78777459 ref YP_393774.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-15	Identity = 53.57%
	2	gi 149197841 ref ZP_01874890.1	Lentisphaera araneosa HTCC2155	E-value = 1.00E-12	Identity = 46.51%
	3	gi 16077491 ref NP_388305.1	Bacillus subtilis subsp. subtilis str. 168	E-value = 1.00E-11	Identity = 53.25%
	4	gi 49481297 ref YP_039388.1	Bacillus thuringiensis serovar konkukian str. 97-27	E-value = 2.00E-11	Identity = 54.55%
	5	gi 126645126 ref ZP_01717670.1	Algoriphagus sp. PR1	E-value = 3.00E-11	Identity = 42.53%
AB1426	1		*** No matches found ***		
AB1427	1	thil gi 152993069 ref YP_001358790.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 64.34%
	2	gi 78485834 ref YP_391759.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-154	Identity = 58.71%
	3	gi 94499692 ref ZP_01306229.1	Oceanobacter sp. RED65	E-value = 9.00E-117	Identity = 47.22%
	4	gi 89092122 ref ZP_01165077.1	Oceanospirillum sp. MED92	E-value = 1.00E-116	Identity = 45.59%
	5	gi 119856413 ref ZP_01637846.1	Pseudomonas putida W619	E-value = 1.00E-116	Identity = 45.40%
AB1428	1		*** No matches found ***		
AB1429	1		*** No matches found ***		
AB1430	1	gi 82703408 ref YP_412974.1	Nitrosospira multiformis ATCC 25196	E-value = 4.00E-123	Identity = 57.14%
	2	gi 114331308 ref YP_747530.1	Nitrosomonas eutropha C91	E-value = 1.00E-118	Identity = 56.43%
	3	gi 89901851 ref YP_524322.1	Rhodoferrax ferrireducens T118	E-value = 3.00E-118	Identity = 55.07%
	4	gi 30249211 ref NP_841281.1	Nitrosomonas europaea ATCC 19718	E-value = 5.00E-118	Identity = 55.85%
	5	gi 119898591 ref YP_933804.1	Azoarcus sp. BH72	E-value = 1.00E-117	Identity = 52.98%
AB1431	1	hypF gi 152993244 ref YP_001358965.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 48.45%
	2	gi 78777628 ref YP_393943.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 50.07%
	3	gi 152061261 dbj BAF73680.1	Hydrogenobacter thermophilus	E-value = 0	Identity = 42.65%
	4	gi 15606085 ref NP_213462.1	Aquifex aeolicus VF5	E-value = 0	Identity = 42.91%
	5	gi 34557188 ref NP_907003.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 44.94%
AB1432	1	gi 149194380 ref ZP_01871477.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-49	Identity = 30.38%
	2	gi 78777629 ref YP_393944.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-43	Identity = 30.58%
	3	gi 118475232 ref YP_892106.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-31	Identity = 26.75%
	4	gi 154148724 ref YP_001406429.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-27	Identity = 25.28%
	5	gi 154174343 ref YP_001408292.1	Campylobacter curvus 525.92	E-value = 4.00E-23	Identity = 25.32%
AB1433	1	hydD gi 78777630 ref YP_393945.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-46	Identity = 50.56%
	2	gi 149194379 ref ZP_01871476.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-44	Identity = 53.07%
	3	gi 34557996 ref NP_907811.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-43	Identity = 51.98%
	4	gi 32265558 ref NP_859590.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-43	Identity = 49.15%
	5	gi 118474372 ref YP_892107.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-42	Identity = 50.58%
AB1434	1	hydC gi 154173991 ref YP_001408294.1	Campylobacter curvus 525.92	E-value = 2.00E-60	Identity = 58.49%
	2	gi 57167623 ref ZP_00366763.1	Campylobacter coli RM2228	E-value = 3.00E-60	Identity = 55.35%
	3	gi 118474674 ref YP_892108.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-60	Identity = 56.88%
	4	gi 154148495 ref YP_001406427.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-59	Identity = 56.60%
	5	gi 57241184 ref ZP_00369131.1	Campylobacter lari RM2100	E-value = 6.00E-58	Identity = 57.21%
AB1435	1	hydB gi 1333732 emb CAA46303.1	Wolinella succinogenes	E-value = 0	Identity = 68.66%
	2	gi 34557998 ref NP_907813.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 68.66%
	3	gi 78777632 ref YP_393947.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 68.36%
	4	gi 32265556 ref NP_859588.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 69.88%
	5	gi 118475447 ref YP_892109.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 66.14%
AB1436	1	hydA gi 15792591 ref NP_282414.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-179	Identity = 76.92%

	2	gi 86151084 ref ZP_01069300.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-178	Identity = 76.66%
	3	gi 157415531 ref YP_001482787.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 2.00E-178	Identity = 76.66%
	4	gi 86153079 ref ZP_01071284.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-178	Identity = 76.66%
	5	gi 118474859 ref YP_892110.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-178	Identity = 73.63%
AB1437	1	gi 34557007 ref NP_906822.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-33	Identity = 30.34%
	2	gi 34557769 ref NP_907584.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-31	Identity = 28.97%
	3	gi 84328238 ref ZP_00976245.1	Pseudomonas aeruginosa 2192	E-value = 1.00E-26	Identity = 26.69%
	4	gi 107100752 ref ZP_01364670.1	Pseudomonas aeruginosa PACS2	E-value = 3.00E-26	Identity = 26.69%
	5	gi 15596498 ref NP_249992.1	Pseudomonas aeruginosa PAO1	E-value = 4.00E-26	Identity = 26.69%
AB1438	1	gi 34557006 ref NP_906821.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-16	Identity = 31.41%
	2	gi 70731436 ref YP_261177.1	Pseudomonas fluorescens Pf-5	E-value = 1.00E-14	Identity = 31.03%
	3	gi 30248569 ref NP_840639.1	Nitrosomonas europaea ATCC 19718	E-value = 1.00E-13	Identity = 31.17%
	4	gi 34557770 ref NP_907585.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-13	Identity = 33.77%
	5	gi 30249178 ref NP_841248.1	Nitrosomonas europaea ATCC 19718	E-value = 4.00E-12	Identity = 26.39%
AB1439	1	gi 149194380 ref ZP_01871477.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-20	Identity = 26.89%
	2	gi 57242240 ref ZP_00370179.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-09	Identity = 26.27%
AB1440	1	<i>hyaD</i> gi 152990711 ref YP_001356433.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-47	Identity = 62.28%
	2	gi 78486375 ref YP_392300.1	Thiomicrospira crunogena XCL-2	E-value = 5.00E-33	Identity = 42.77%
	3	gi 152993246 ref YP_001358967.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-25	Identity = 40.35%
	4	gi 152993228 ref YP_001358949.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-21	Identity = 36.05%
	5	gi 116750373 ref YP_847060.1	Syntrophobacter fumaroxidans MPOB	E-value = 4.00E-19	Identity = 33.13%
AB1441	1	<i>hyaC</i> gi 152990710 ref YP_001356432.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-78	Identity = 67.70%
	2	gi 152993247 ref YP_001358968.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-77	Identity = 67.22%
	3	gi 126732740 ref ZP_01748535.1	Sagittula stellata E-37	E-value = 3.00E-12	Identity = 27.80%
	4	gi 154246118 ref YP_001417076.1	Xanthobacter autotrophicus Py2	E-value = 4.00E-12	Identity = 29.52%
	5	gi 71909597 ref YP_287184.1	Dechloromonas aromatica RCB	E-value = 8.00E-12	Identity = 28.51%
AB1442	1	<i>hyaB</i> gi 152990709 ref YP_001356431.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 74.48%
	2	gi 152993248 ref YP_001358969.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 72.04%
	3	gi 74356071 dbj BAE44407.1	Sulfurimonas paralvinella	E-value = 0	Identity = 73.59%
	4	gi 74356068 dbj BAE44405.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 70.41%
	5	gi 74356062 dbj BAE44401.1	Hydrogenimonas thermophila	E-value = 0	Identity = 71.09%
AB1443	1	<i>hyaA</i> gi 152990708 ref YP_001356430.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 76.24%
	2	gi 152993249 ref YP_001358970.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 76.96%
	3	gi 149194554 ref ZP_01871650.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-117	Identity = 57.69%
	4	gi 117920325 ref YP_869517.1	Shewanella sp. ANA-3	E-value = 6.00E-114	Identity = 51.73%
	5	gi 126174115 ref YP_001050264.1	Shewanella baltica OS155	E-value = 2.00E-113	Identity = 51.73%
AB1444	1	<i>hupL</i> gi 152061264 dbj BAF73683.1	Hydrogenobacter thermophilus	E-value = 1.00E-97	Identity = 43.68%
	2	gi 152993250 ref YP_001358971.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-93	Identity = 40.00%
	3	gi 78777634 ref YP_393949.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-88	Identity = 40.31%
	4	gi 15606172 ref NP_213549.1	Aquifex aeolicus VF5	E-value = 1.00E-77	Identity = 38.51%
	5	gi 156718554 ref ZP_02060218.1	Hydrogenobaculum sp. Y04AAS1	E-value = 5.00E-72	Identity = 35.18%
AB1445	1	<i>hupS</i> gi 156718553 ref ZP_02060217.1	Hydrogenobaculum sp. Y04AAS1	E-value = 7.00E-78	Identity = 49.01%
	2	gi 78777635 ref YP_393950.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-76	Identity = 46.80%
	3	gi 152993251 ref YP_001358972.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-73	Identity = 46.03%
	4	gi 152990706 ref YP_001356428.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-71	Identity = 45.15%
	5	gi 149194374 ref ZP_01871471.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-68	Identity = 44.86%
AB1446	1	gi 152993252 ref YP_001358973.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-39	Identity = 55.63%
	2	gi 152990705 ref YP_001356427.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-38	Identity = 54.25%
	3	gi 149194373 ref ZP_01871470.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-37	Identity = 52.32%



	4	gi 78777636 ref YP_393951.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-37	Identity = 53.59%
	5	gi 156718552 ref ZP_02060216.1	Hydrogenobaculum sp. Y04AAS1	E-value = 2.00E-35	Identity = 50.99%
AB1447	1	acnB gi 152992939 ref YP_001358660.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 76.08%
	2	gi 21673378 ref NP_661443.1	Chlorobium tepidum TLS	E-value = 0	Identity = 71.65%
	3	gi 145219413 ref YP_001130122.1	Prosthecochloris vibrioformis DSM 265	E-value = 0	Identity = 69.89%
	4	gi 149194800 ref ZP_01871894.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 70.35%
	5	gi 110597959 ref ZP_01386240.1	Chlorobium ferrooxidans DSM 13031	E-value = 0	Identity = 69.31%
AB1448	1	gi 83644037 ref YP_432472.1	Hahella chejuensis KCTC 2396	E-value = 2.00E-16	Identity = 35.00%
	2	gi 17233198 ref NP_490288.1	Nostoc sp. PCC 7120	E-value = 1.00E-15	Identity = 34.51%
	3	gi 21673295 ref NP_661360.1	Chlorobium tepidum TLS	E-value = 2.00E-15	Identity = 34.72%
	4	gi 89092965 ref ZP_01165916.1	Oceanospirillum sp. MED92	E-value = 2.00E-15	Identity = 35.29%
	5	gi 114778304 ref ZP_01453163.1	Mariprofundus ferrooxydans PV-1	E-value = 2.00E-14	Identity = 31.39%
AB1449	1	gi 149910133 ref ZP_01898780.1	Moritella sp. PE36	E-value = 4.00E-58	Identity = 42.36%
	2	gi 119945951 ref YP_943631.1	Psychromonas ingrahamii 37	E-value = 5.00E-55	Identity = 38.10%
	3	gi 85858780 ref YP_460982.1	Syntrophus aciditrophicus SB	E-value = 4.00E-34	Identity = 35.28%
	4	gi 114778031 ref ZP_01452931.1	Mariprofundus ferrooxydans PV-1	E-value = 4.00E-33	Identity = 32.24%
	5	gi 118591123 ref ZP_01548522.1	Stappia aggregata IAM 12614	E-value = 1.00E-32	Identity = 33.11%
AB1450	1	gi 34557403 ref NP_907218.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-75	Identity = 62.87%
	2	gi 78777586 ref YP_393901.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-68	Identity = 60.59%
	3	gi 67462064 sp Q7VFS1 Y1604_HELHP	Helicobacter pylori	E-value = 7.00E-67	Identity = 60.83%
	4	gi 49036523 sp Q7MXR6 Y097_PORGI	Porphyromonas gingivalis	E-value = 4.00E-62	Identity = 52.77%
	5	gi 118474323 ref YP_891625.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-61	Identity = 57.45%
AB1451	1	gi 157165770 ref YP_001467606.1	Campylobacter concisus 13826	E-value = 1.00E-60	Identity = 53.63%
	2	gi 154175259 ref YP_001408988.1	Campylobacter curvus 525.92	E-value = 4.00E-59	Identity = 54.25%
	3	gi 118474953 ref YP_891566.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-53	Identity = 46.56%
	4	gi 78777481 ref YP_393796.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-52	Identity = 50.00%
	5	gi 154148618 ref YP_001405921.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-48	Identity = 44.53%
AB1452	1	gi 15792695 ref NP_282518.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-27	Identity = 43.09%
	2	gi 57238416 ref YP_179547.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-27	Identity = 41.49%
	3	gi 157415610 ref YP_001482866.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-27	Identity = 43.09%
	4	gi 121613470 ref YP_001001031.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 6.00E-27	Identity = 42.02%
	5	gi 154174115 ref YP_001408989.1	Campylobacter curvus 525.92	E-value = 1.00E-25	Identity = 40.22%
AB1453	1	gi 118475581 ref YP_891568.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 49.88%
	2	gi 78777479 ref YP_393794.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 47.92%
	3	gi 121541285 ref ZP_01673039.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 0	Identity = 46.26%
	4	gi 157164665 ref YP_001467604.1	Campylobacter concisus 13826	E-value = 0	Identity = 46.94%
	5	gi 154175484 ref YP_001408990.1	Campylobacter curvus 525.92	E-value = 0	Identity = 46.05%
AB1454	1	gi 83644827 ref YP_433262.1	Hahella chejuensis KCTC 2396	E-value = 2.00E-47	Identity = 46.49%
	2	gi 152998118 ref YP_001342953.1	Marinomonas sp. MWYL1	E-value = 2.00E-46	Identity = 46.49%
	3	gi 149375693 ref ZP_01893462.1	Marinobacter algicola DG893	E-value = 6.00E-45	Identity = 42.70%
	4	gi 120555885 ref YP_960236.1	Marinobacter aquaeolei VT8	E-value = 9.00E-44	Identity = 44.32%
	5	gi 23097794 ref NP_691260.1	Oceanobacillus iheyensis HTE831	E-value = 3.00E-43	Identity = 47.03%
AB1455	1	gi 39995295 ref NP_951246.1	Geobacter sulfurreducens PCA	E-value = 1.00E-30	Identity = 36.71%
	2	gi 78221449 ref YP_383196.1	Geobacter metallireducens GS-15	E-value = 2.00E-30	Identity = 35.44%
	3	gi 118581293 ref YP_902543.1	Pelobacter propionicus DSM 2379	E-value = 5.00E-30	Identity = 35.24%
	4	gi 67919842 ref ZP_00513401.1	Chlorobium limicola DSM 245	E-value = 1.00E-26	Identity = 35.53%
	5	gi 67938042 ref ZP_00530572.1	Chlorobium phaeobacteroides BS1	E-value = 8.00E-25	Identity = 32.66%
AB1456	1	gi 34556527 ref NP_906342.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-23	Identity = 39.77%
	2	gi 157415470 ref YP_001482726.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-19	Identity = 35.29%

	3	gi 86150820 ref ZP_01069036.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-19	Identity = 34.76%
	4	gi 148926210 ref ZP_01809895.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 4.00E-19	Identity = 35.29%
	5	gi 57238079 ref YP_179328.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-18	Identity = 34.76%
AB1457	1	<i>dsbA</i> gi 110346947 ref YP_665765.1	Mesorhizobium sp. BNC1	E-value = 2.00E-31	Identity = 32.86%
	2	gi 120556184 ref YP_960535.1	Marinobacter aquaeolei VT8	E-value = 3.00E-31	Identity = 34.27%
	3	gi 149374352 ref ZP_01892126.1	Marinobacter algicola DG893	E-value = 1.00E-30	Identity = 32.86%
	4	gi 85706988 ref ZP_01038077.1	Roseovarius sp. 217	E-value = 5.00E-29	Identity = 35.45%
	5	gi 86139682 ref ZP_01058249.1	Roseobacter sp. MED193	E-value = 1.00E-28	Identity = 33.95%
AB1458	1	<i>dsbB</i> gi 113940134 ref ZP_01425975.1	Herpetosiphon aurantiacus ATCC 23779	E-value = 5.00E-26	Identity = 46.09%
	2	gi 89899229 ref YP_521700.1	Rhodoferrax ferrireducens T118	E-value = 1.00E-25	Identity = 54.84%
	3	gi 52081838 ref YP_080629.1	Bacillus licheniformis ATCC 14580	E-value = 4.00E-23	Identity = 52.25%
	4	gi 154687466 ref YP_001422627.1	Bacillus amyloliquefaciens FZB42	E-value = 2.00E-22	Identity = 46.46%
	5	gi 149180934 ref ZP_01859436.1	Bacillus sp. SG-1	E-value = 4.00E-22	Identity = 44.96%
AB1459	1	gi 78777478 ref YP_393793.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 58.60%
	2	gi 27379725 ref NP_771254.1	Bradyrhizobium japonicum USDA 110	E-value = 0	Identity = 43.57%
	3	gi 148255555 ref YP_001240140.1	Bradyrhizobium sp. BTAi1	E-value = 0	Identity = 43.38%
	4	gi 146340703 ref YP_001205751.1	Bradyrhizobium sp. ORS278	E-value = 0	Identity = 43.08%
	5	gi 92117324 ref YP_577053.1	Nitrobacter hamburgensis X14	E-value = 0	Identity = 42.68%
AB1460	1	gi 34557006 ref NP_906821.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-33	Identity = 52.56%
	2	gi 118729457 ref ZP_01577974.1	Delftia acidovorans SPH-1	E-value = 5.00E-16	Identity = 33.13%
	3	gi 34557770 ref NP_907585.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-16	Identity = 38.31%
	4	gi 116496542 gb ABJ99054.1	uncultured bacterium	E-value = 2.00E-15	Identity = 27.67%
	5	gi 33598198 ref NP_885841.1	Bordetella parapertussis 12822	E-value = 3.00E-15	Identity = 31.85%
AB1461	1	gi 34557007 ref NP_906822.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-60	Identity = 42.34%
	2	gi 34557769 ref NP_907584.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-29	Identity = 30.56%
	3	gi 30248821 ref NP_840891.1	Nitrosomonas europaea ATCC 19718	E-value = 2.00E-20	Identity = 27.49%
	4	gi 83747516 ref ZP_00944554.1	Ralstonia solanacearum UW551	E-value = 1.00E-18	Identity = 27.21%
	5	gi 17547638 ref NP_521040.1	Ralstonia solanacearum GMI1000	E-value = 4.00E-18	Identity = 26.84%
AB1462	1	gi 30248981 ref NP_841051.1	Nitrosomonas europaea ATCC 19718	E-value = 9.00E-178	Identity = 47.15%
	2	gi 30249066 ref NP_841136.1	Nitrosomonas europaea ATCC 19718	E-value = 5.00E-175	Identity = 45.62%
	3	gi 30248820 ref NP_840890.1	Nitrosomonas europaea ATCC 19718	E-value = 1.00E-173	Identity = 46.65%
	4	gi 66047091 ref YP_236932.1	Pseudomonas syringae pv. syringae B728a	E-value = 2.00E-122	Identity = 35.79%
	5	gi 28871270 ref NP_793889.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 5.00E-121	Identity = 35.78%
AB1463	1	gi 119945575 ref YP_943255.1	Psychromonas ingrahamii 37	E-value = 3.00E-120	Identity = 47.17%
	2	gi 71280812 ref YP_270895.1	Colwellia psychrerythraea 34H	E-value = 3.00E-115	Identity = 44.73%
	3	gi 134096466 ref YP_001101541.1	Herminiimonas arsenicoxydans	E-value = 2.00E-81	Identity = 32.85%
	4	gi 95928328 ref ZP_01311076.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-80	Identity = 32.98%
	5	gi 51244314 ref YP_064198.1	Desulfotalea psychrophila LSv54	E-value = 1.00E-79	Identity = 33.11%
AB1464	1	gi 154174424 ref YP_001407383.1	Campylobacter curvus 525.92	E-value = 5.00E-92	Identity = 66.19%
	2	gi 152989873 ref YP_001355595.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-80	Identity = 57.89%
	3	gi 125974025 ref YP_001037935.1	Clostridium thermocellum ATCC 27405	E-value = 9.00E-58	Identity = 44.44%
	4	gi 95929109 ref ZP_01311854.1	Desulfuromonas acetoxidans DSM 684	E-value = 1.00E-56	Identity = 40.79%
	5	gi 15643263 ref NP_228307.1	Thermotoga maritima MSB8	E-value = 1.00E-54	Identity = 44.56%
AB1465	1	<i>betT</i> gi 15600484 ref NP_253978.1	Pseudomonas aeruginosa PAO1	E-value = 0	Identity = 52.60%
	2	gi 84324003 ref ZP_00972068.1	Pseudomonas aeruginosa 2192	E-value = 0	Identity = 52.60%
	3	gi 26990662 ref NP_746087.1	Pseudomonas putida KT2440	E-value = 0	Identity = 51.54%
	4	gi 56461488 ref YP_156769.1	Idiomarina loihiensis L2TR	E-value = 0	Identity = 51.52%
	5	gi 152986479 ref YP_001351380.1	Pseudomonas aeruginosa PA7	E-value = 0	Identity = 52.52%
AB1466	1	<i>kefB</i> gi 109898580 ref YP_661835.1	Pseudoalteromonas atlantica T6c	E-value = 3.00E-156	Identity = 58.30%

	2	gi 71281756 ref YP_268492.1	Colwellia psychrerythraea 34H	E-value = 2.00E-148	Identity = 55.06%
	3	gi 119946263 ref YP_943943.1	Psychromonas ingrahamii 37	E-value = 9.00E-147	Identity = 57.92%
	4	gi 78778273 ref YP_394588.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-116	Identity = 48.59%
	5	gi 154174318 ref YP_001408404.1	Campylobacter curvus 525.92	E-value = 1.00E-91	Identity = 38.94%
AB1467	1	gi 114775673 ref ZP_01451241.1	Mariprofundus ferrooxydans PV-1	E-value = 4.00E-17	Identity = 48.96%
	2	gi 91788227 ref YP_549179.1	Polaromonas sp. JS666	E-value = 3.00E-13	Identity = 40.00%
	3	gi 149907978 ref ZP_01896646.1	Moritella sp. PE36	E-value = 7.00E-13	Identity = 44.44%
	4	gi 90412832 ref ZP_01220832.1	Photobacterium profundum 3TCK	E-value = 8.00E-13	Identity = 52.94%
	5	gi 54309950 ref YP_130970.1	Photobacterium profundum SS9	E-value = 9.00E-13	Identity = 52.94%
AB1468	1	<i>glyA2</i> gi 78778141 ref YP_394456.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 84.52%
	2	gi 78777472 ref YP_393787.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 83.01%
	3	gi 152992073 ref YP_001357794.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 83.58%
	4	gi 149193729 ref ZP_01870827.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 76.76%
	5	gi 118475761 ref YP_892299.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 75.49%
AB1469	1	<i>ada</i> gi 78778140 ref YP_394455.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-138	Identity = 87.59%
	2	gi 34557931 ref NP_907746.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-91	Identity = 60.44%
	3	gi 116326974 ref YP_796694.1	Leptospira borgpetersenii serovar Hardjo-bovis L550	E-value = 8.00E-62	Identity = 43.22%
	4	gi 71281861 ref YP_270029.1	Colwellia psychrerythraea 34H	E-value = 7.00E-61	Identity = 41.89%
	5	gi 108760938 ref YP_634036.1	Myxococcus xanthus DK 1622	E-value = 1.00E-60	Identity = 39.42%
AB1470	1	gi 78776541 ref YP_392856.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-68	Identity = 58.05%
	2	gi 157374449 ref YP_001473049.1	Shewanella sediminis HAW-EB3	E-value = 1.00E-62	Identity = 54.74%
	3	gi 148643535 ref YP_001274048.1	Methanobrevibacter smithii ATCC 35061	E-value = 9.00E-52	Identity = 51.09%
	4	gi 45358149 ref NP_987706.1	Methanococcus maripaludis S2	E-value = 7.00E-49	Identity = 51.83%
	5	gi 21228990 ref NP_634912.1	Methanosarcina mazei Go1	E-value = 1.00E-48	Identity = 46.55%
AB1471	1	gi 77919867 ref YP_357682.1	Pelobacter carbinolicus DSM 2380	E-value = 1.00E-35	Identity = 48.41%
	2	gi 109899705 ref YP_662960.1	Pseudoalteromonas atlantica T6c	E-value = 1.00E-31	Identity = 45.68%
	3	gi 90023082 ref YP_528909.1	Saccharophagus degradans 2-40	E-value = 4.00E-27	Identity = 46.25%
	4	gi 78777319 ref YP_393634.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-22	Identity = 44.37%
	5	gi 91201967 emb CAJ75027.1	Candidatus Kuenenia stuttgartiensis	E-value = 5.00E-14	Identity = 31.21%
AB1472	1	gi 78778128 ref YP_394443.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-24	Identity = 63.92%
	2	gi 148265234 ref YP_001231940.1	Geobacter uraniumreducens Rf4	E-value = 5.00E-19	Identity = 53.06%
	3	gi 110597931 ref ZP_01386213.1	Chlorobium ferrooxidans DSM 13031	E-value = 6.00E-19	Identity = 52.27%
	4	gi 67154185 ref ZP_00415930.1	Azotobacter vinelandii AvOP	E-value = 3.00E-18	Identity = 48.45%
	5	gi 94264326 ref ZP_01288119.1	delta proteobacterium MLMS-1	E-value = 1.00E-17	Identity = 46.32%
AB1473	1		<b>*** No matches found ***</b>		
AB1474	1	gi 78778155 ref YP_394470.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-68	Identity = 76.43%
	2	gi 78778142 ref YP_394457.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-63	Identity = 71.34%
	3	gi 34557930 ref NP_907745.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-61	Identity = 68.79%
	4	gi 106886469 ref ZP_01353808.1	Clostridium phytofermentans ISDg	E-value = 2.00E-49	Identity = 57.32%
	5	gi 106894095 ref ZP_01361217.1	Clostridium sp. OhILAs	E-value = 6.00E-43	Identity = 52.23%
AB1475	1	<i>benE</i> gi 118733230 ref ZP_01581742.1	Delftia acidovorans SPH-1	E-value = 1.00E-132	Identity = 69.82%
	2	gi 118051873 ref ZP_01520421.1	Comamonas testosteroni KF-1	E-value = 1.00E-128	Identity = 71.28%
	3	gi 152981116 ref YP_001353696.1	Janthinobacterium sp. Marseille	E-value = 5.00E-128	Identity = 70.45%
	4	gi 91976777 ref YP_569436.1	Rhodopseudomonas palustris BisB5	E-value = 5.00E-127	Identity = 69.95%
	5	gi 153011455 ref YP_001372669.1	Ochrobactrum anthropi ATCC 49188	E-value = 1.00E-124	Identity = 70.98%
AB1476	1	<i>argD2</i> gi 78777452 ref YP_393767.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-117	Identity = 54.45%
	2	gi 152990810 ref YP_001356532.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-115	Identity = 53.81%
	3	gi 34556738 ref NP_906553.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-112	Identity = 51.44%
	4	gi 154148678 ref YP_001406297.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-110	Identity = 55.99%

	5	gi 154174095 ref YP_001408104.1	Campylobacter curvus 525.92	E-value = 2.00E-109	Identity = 55.06%
AB1477	1	gi 34556825 ref NP_906640.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-40	Identity = 44.50%
	2	gi 52425939 ref YP_089076.1	Mannheimia succiniciproducens MBEL55E	E-value = 4.00E-30	Identity = 33.19%
	3	gi 145632522 ref ZP_01788256.1	Haemophilus influenzae 3655	E-value = 2.00E-29	Identity = 33.81%
	4	gi 152979425 ref YP_001345054.1	Actinobacillus succinogenes 130Z	E-value = 3.00E-29	Identity = 31.47%
	5	gi 145638816 ref ZP_01794425.1	Haemophilus influenzae PittII	E-value = 4.00E-29	Identity = 33.81%
AB1478	1	lipA gi 78224341 ref YP_386088.1	Geobacter metallireducens GS-15	E-value = 7.00E-82	Identity = 54.51%
	2	gi 148262482 ref YP_001229188.1	Geobacter uraniumreducens Rf4	E-value = 2.00E-81	Identity = 54.15%
	3	gi 152992558 ref YP_001358279.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-78	Identity = 52.82%
	4	gi 110600043 ref ZP_01388272.1	Geobacter sp. FRC-32	E-value = 1.00E-77	Identity = 51.61%
	5	gi 145618036 ref ZP_01774098.1	Geobacter bemidjensis Bem	E-value = 9.00E-77	Identity = 50.72%
AB1479	1	gi 152992559 ref YP_001358280.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-36	Identity = 36.86%
	2	gi 148262479 ref YP_001229185.1	Geobacter uraniumreducens Rf4	E-value = 3.00E-31	Identity = 35.39%
	3	gi 118580653 ref YP_901903.1	Pelobacter propionicus DSM 2379	E-value = 2.00E-30	Identity = 32.37%
	4	gi 110600042 ref ZP_01388271.1	Geobacter sp. FRC-32	E-value = 3.00E-29	Identity = 32.02%
	5	gi 145618035 ref ZP_01774097.1	Geobacter bemidjensis Bem	E-value = 2.00E-27	Identity = 32.37%
AB1480	1	aceE gi 117918883 ref YP_868075.1	Shewanella sp. ANA-3	E-value = 0	Identity = 70.22%
	2	gi 24372019 ref NP_716061.1	Shewanella oneidensis MR-1	E-value = 0	Identity = 70.00%
	3	gi 120597357 ref YP_961931.1	Shewanella sp. W3-18-1	E-value = 0	Identity = 70.11%
	4	gi 113968772 ref YP_732565.1	Shewanella sp. MR-4	E-value = 0	Identity = 70.00%
	5	gi 126176103 ref YP_001052252.1	Shewanella baltica OS155	E-value = 0	Identity = 69.78%
AB1481	1	aceF gi 113461237 ref YP_719306.1	Haemophilus somnus 129PT	E-value = 5.00E-137	Identity = 50.62%
	2	gi 114564928 ref YP_752442.1	Shewanella frigidimarina NCIMB 400	E-value = 1.00E-135	Identity = 50.27%
	3	gi 53728561 ref ZP_00132374.2	Haemophilus somnus 2336	E-value = 2.00E-135	Identity = 50.44%
	4	gi 113950875 ref ZP_01436484.1	Shewanella baltica OS195	E-value = 2.00E-135	Identity = 50.45%
	5	gi 149114198 ref ZP_01840953.1	Shewanella baltica OS223	E-value = 3.00E-135	Identity = 51.09%
AB1482	1	lpdA gi 149191281 ref ZP_01869536.1	Vibrio shilonii AK1	E-value = 1.00E-176	Identity = 66.32%
	2	gi 15642409 ref NP_232042.1	Vibrio cholerae O1 biovar eltor str. N16961	E-value = 2.00E-176	Identity = 66.11%
	3	gi 116216869 ref ZP_01482696.1	Vibrio cholerae RC385	E-value = 2.00E-176	Identity = 66.11%
	4	gi 37680955 ref NP_935564.1	Vibrio vulnificus YJ016	E-value = 9.00E-176	Identity = 65.68%
	5	gi 52425389 ref YP_088526.1	Mannheimia succiniciproducens MBEL55E	E-value = 2.00E-175	Identity = 64.77%
AB1483	1	gi 116748043 ref YP_844730.1	Syntrophobacter fumaroxidans MPOB	E-value = 1.00E-32	Identity = 37.95%
	2	gi 152981489 ref YP_001355336.1	Janthinobacterium sp. Marseille	E-value = 3.00E-32	Identity = 42.13%
	3	gi 77165701 ref YP_344226.1	Nitrosococcus oceani ATCC 19707	E-value = 7.00E-32	Identity = 38.29%
	4	gi 118745022 ref ZP_01593006.1	Geobacter lovleyi SZ	E-value = 4.00E-30	Identity = 43.35%
	5	gi 20091784 ref NP_617859.1	Methanosarcina acetivorans C2A	E-value = 1.00E-29	Identity = 38.74%
AB1484	1	gi 119899284 ref YP_934497.1	Azoarcus sp. BH72	E-value = 0	Identity = 47.27%
	2	gi 34557768 ref NP_907583.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 45.51%
	3	gi 34557008 ref NP_906823.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-170	Identity = 43.81%
	4	gi 21244223 ref NP_643805.1	Xanthomonas axonopodis pv. citri str. 306	E-value = 3.00E-151	Identity = 40.63%
	5	gi 114046494 ref YP_737044.1	Shewanella sp. MR-7	E-value = 8.00E-149	Identity = 43.15%
AB1485	1	gi 15896283 ref NP_349632.1	Clostridium acetobutylicum ATCC 824	E-value = 2.00E-58	Identity = 43.92%
	2	gi 75759687 ref ZP_00739770.1	Bacillus thuringiensis serovar israelensis ATCC 35646	E-value = 5.00E-58	Identity = 41.05%
	3	gi 116872716 ref YP_849497.1	Listeria welshimeri serovar 6b str. SLCC5334	E-value = 5.00E-58	Identity = 42.32%
	4	gi 47097699 ref ZP_00235208.1	Listeria monocytogenes str. 1/2a F6854	E-value = 7.00E-58	Identity = 41.30%
	5	gi 16803323 ref NP_464808.1	Listeria monocytogenes EGD-e	E-value = 9.00E-58	Identity = 41.30%
AB1486	1	gi 118743697 ref ZP_01591699.1	Geobacter lovleyi SZ	E-value = 1.00E-58	Identity = 46.89%
	2	gi 148265527 ref YP_001232233.1	Geobacter uraniumreducens Rf4	E-value = 5.00E-57	Identity = 43.68%
	3	gi 67917703 ref ZP_00511308.1	Chlorobium limicola DSM 245	E-value = 7.00E-57	Identity = 47.22%

	4	gi 146283038 ref YP_001173191.1	<i>Pseudomonas stutzeri</i> A1501	E-value = 5.00E-56	Identity = 43.10%
	5	gi 55418027 ref YP_133927.1	Plasmid pB3	E-value = 3.00E-54	Identity = 43.19%
AB1487	1	gi 78776226 ref YP_392541.1	<i>Sulfuromonas denitrificans</i> ATCC 33889	E-value = 2.00E-149	Identity = 69.54%
	2	gi 152992886 ref YP_001358607.1	<i>Sulfurovum</i> sp. NBC37-1	E-value = 8.00E-147	Identity = 63.66%
	3	gi 37525462 ref NP_928806.1	<i>Photorhabdus luminescens</i> subsp. <i>laumondii</i> TTO1	E-value = 1.00E-146	Identity = 63.74%
	4	gi 145589523 ref YP_001156120.1	<i>Polynucleobacter</i> sp. QLW-P1DMWA-1	E-value = 4.00E-144	Identity = 64.71%
	5	gi 157369574 ref YP_001477563.1	<i>Serratia proteamaculans</i> 568	E-value = 4.00E-142	Identity = 64.99%
AB1488	1	gi 150003156 ref YP_001297900.1	<i>Bacteroides vulgatus</i> ATCC 8482	E-value = 6.00E-67	Identity = 38.48%
	2	gi 148266154 ref YP_001232860.1	<i>Geobacter uraniumreducens</i> Rf4	E-value = 6.00E-66	Identity = 36.07%
	3	gi 91216664 ref ZP_01253629.1	<i>Psychroflexus torquis</i> ATCC 700755	E-value = 4.00E-61	Identity = 37.95%
	4	gi 150010028 ref YP_001304771.1	<i>Parabacteroides distasonis</i> ATCC 8503	E-value = 2.00E-60	Identity = 39.78%
	5	gi 152992178 ref YP_001357899.1	<i>Sulfurovum</i> sp. NBC37-1	E-value = 3.00E-60	Identity = 41.90%
AB1489	1	gi 157414453 ref YP_001481709.1	<i>Campylobacter jejuni</i> subsp. <i>jejuni</i> 81116	E-value = 8.00E-125	Identity = 73.27%
	2	gi 78777762 ref YP_394077.1	<i>Sulfuromonas denitrificans</i> ATCC 33889	E-value = 9.00E-119	Identity = 66.88%
	3	gi 462657 sp P34877 MTSA_LACLC	<i>Lactococcus lactis</i> subsp. <i>cremoris</i>	E-value = 5.00E-105	Identity = 61.59%
	4	gi 50914506 ref YP_060478.1	<i>Streptococcus pyogenes</i> MGAS10394	E-value = 5.00E-105	Identity = 60.12%
	5	gi 127471 sp P24581 MTNX_NEILA	<i>Neisseria lactamica</i>	E-value = 9.00E-103	Identity = 60.47%
AB1490	1	gi 157414452 ref YP_001481708.1	<i>Campylobacter jejuni</i> subsp. <i>jejuni</i> 81116	E-value = 5.00E-35	Identity = 36.61%
	2	gi 78777760 ref YP_394075.1	<i>Sulfuromonas denitrificans</i> ATCC 33889	E-value = 1.00E-31	Identity = 33.53%
AB1492	1	gi 152993198 ref YP_001358919.1	<i>Sulfurovum</i> sp. NBC37-1	E-value = 5.00E-15	Identity = 50.55%
	2	gi 19705293 ref NP_602788.1	<i>Fusobacterium nucleatum</i> subsp. <i>nucleatum</i> ATCC 25586	E-value = 2.00E-12	Identity = 49.43%
	3	gi 34763122 ref ZP_00144092.1	<i>Fusobacterium nucleatum</i> subsp. <i>vincentii</i> ATCC 49256	E-value = 8.00E-12	Identity = 49.43%
	4	gi 148322442 gb EDK87692.1	<i>Fusobacterium nucleatum</i> subsp. <i>polymorphum</i> ATCC 10953	E-value = 1.00E-11	Identity = 49.43%
	5	gi 34540741 ref NP_905220.1	<i>Porphyromonas gingivalis</i> W83	E-value = 6.00E-09	Identity = 38.82%
AB1493	1	gi 51246875 ref YP_066759.1	<i>Desulfotalea psychrophila</i> LSv54	E-value = 0	Identity = 62.94%
	2	gi 78776315 ref YP_392630.1	<i>Sulfuromonas denitrificans</i> ATCC 33889	E-value = 3.00E-174	Identity = 60.15%
	3	gi 119469669 ref ZP_01612538.1	<i>Alteromonadales bacterium</i> TW-7	E-value = 1.00E-93	Identity = 34.86%
	4	gi 77359055 ref YP_338630.1	<i>Pseudoalteromonas haloplanktis</i> TAC125	E-value = 3.00E-92	Identity = 34.51%
	5	gi 71908545 ref YP_286132.1	<i>Dechloromonas aromatica</i> RCB	E-value = 7.00E-90	Identity = 35.17%
AB1494	1	gi 78486195 ref YP_392120.1	<i>Thiomicrospira crunogena</i> XCL-2	E-value = 3.00E-15	Identity = 38.28%
	2	gi 119946529 ref YP_944209.1	<i>Psychromonas ingrahamii</i> 37	E-value = 4.00E-15	Identity = 33.07%
	3	gi 78486408 ref YP_392333.1	<i>Thiomicrospira crunogena</i> XCL-2	E-value = 2.00E-14	Identity = 32.28%
	4	gi 88797679 ref ZP_01113267.1	<i>Reinekea</i> sp. MED297	E-value = 3.00E-13	Identity = 30.71%
	5	gi 121533905 ref ZP_01665731.1	<i>Thermosinus carboxydivorans</i> Nor1	E-value = 4.00E-13	Identity = 38.10%
AB1495	1	gi 78485876 ref YP_391801.1	<i>Thiomicrospira crunogena</i> XCL-2	E-value = 2.00E-22	Identity = 53.19%
	2	gi 118746413 ref ZP_01594354.1	<i>Geobacter lovleyi</i> SZ	E-value = 2.00E-15	Identity = 41.13%
	3	gi 145618245 ref ZP_01774305.1	<i>Geobacter bemidjiensis</i> Bem	E-value = 1.00E-13	Identity = 41.30%
	4	gi 87302654 ref ZP_01085471.1	<i>Synechococcus</i> sp. WH 5701	E-value = 2.00E-13	Identity = 41.18%
	5	gi 118580064 ref YP_901314.1	<i>Pelobacter propionicus</i> DSM 2379	E-value = 1.00E-12	Identity = 36.17%
AB1496	1	gi 34557389 ref NP_907204.1	<i>Wolinella succinogenes</i> DSM 1740	E-value = 5.00E-69	Identity = 31.06%
	2	gi 46200953 ref ZP_00056091.2	<i>Magnetospirillum magnetotacticum</i> MS-1	E-value = 6.00E-63	Identity = 28.40%
	3	gi 83309953 ref YP_420217.1	<i>Magnetospirillum magneticum</i> AMB-1	E-value = 1.00E-62	Identity = 28.23%
	4	gi 78777187 ref YP_393502.1	<i>Sulfuromonas denitrificans</i> ATCC 33889	E-value = 3.00E-61	Identity = 30.87%
	5	gi 83312482 ref YP_422746.1	<i>Magnetospirillum magneticum</i> AMB-1	E-value = 7.00E-59	Identity = 26.44%
AB1497	1	gi 88857533 ref ZP_01132176.1	<i>Pseudoalteromonas tunicata</i> D2	E-value = 1.00E-39	Identity = 46.77%
AB1498	1	gi 156863454 gb EDO56885.1	<i>Clostridium</i> sp. L2-50	E-value = 5.00E-105	Identity = 58.36%
	2	gi 104780196 ref YP_606694.1	<i>Pseudomonas entomophila</i> L48	E-value = 5.00E-32	Identity = 31.67%
	3	gi 148358583 ref YP_001249790.1	<i>Legionella pneumophila</i> str. Corby	E-value = 2.00E-28	Identity = 34.12%
	4	gi 54295521 ref YP_127936.1	<i>Legionella pneumophila</i> str. Lens	E-value = 4.00E-28	Identity = 33.73%

	5	gi 54298671 ref YP_125040.1	Legionella pneumophila str. Paris	E-value = 6.00E-28	Identity = 33.73%
AB1499	1	gi 148652374 ref YP_001279467.1	Psychrobacter sp. PRwf-1	E-value = 9.00E-27	Identity = 61.05%
	2	gi 16120955 ref NP_404268.1	Yersinia pestis CO92	E-value = 4.00E-26	Identity = 61.05%
	3	gi 119899155 ref YP_934368.1	Azoarcus sp. BH72	E-value = 3.00E-24	Identity = 54.64%
	4	gi 47564352 ref ZP_00235397.1	Bacillus cereus G9241	E-value = 4.00E-24	Identity = 58.95%
	5	gi 73663500 ref YP_302281.1	Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	E-value = 4.00E-23	Identity = 54.64%
AB1500	1	gi 88711273 ref ZP_01105361.1	Flavobacteriales bacterium HTCC2170	E-value = 2.00E-19	Identity = 42.74%
	2	gi 88712111 ref ZP_01106198.1	Flavobacteriales bacterium HTCC2170	E-value = 1.00E-14	Identity = 42.86%
	3	gi 83815994 ref YP_445270.1	Salinibacter ruber DSM 13855	E-value = 1.00E-10	Identity = 37.50%
	4	gi 126646652 ref ZP_01719162.1	Algoriphagus sp. PR1	E-value = 7.00E-07	Identity = 34.88%
AB1501	1	gi 152992967 ref YP_001358688.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-101	Identity = 43.76%
	2	gi 152990028 ref YP_001355750.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-91	Identity = 43.74%
	3	gi 78778034 ref YP_394349.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-87	Identity = 42.29%
	4	gi 149195302 ref ZP_01872390.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-84	Identity = 45.73%
	5	gi 118474273 ref YP_891621.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-54	Identity = 34.20%
AB1502	1	gi 149194391 ref ZP_01871488.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-93	Identity = 46.80%
	2	gi 34557231 ref NP_907046.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-91	Identity = 42.29%
	3	gi 154175348 ref YP_001408258.1	Campylobacter curvus 525.92	E-value = 4.00E-81	Identity = 43.72%
	4	gi 157164837 ref YP_001466854.1	Campylobacter concisus 13826	E-value = 2.00E-79	Identity = 44.30%
	5	gi 118475083 ref YP_892062.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-73	Identity = 40.51%
AB1503	1	gi 78777015 ref YP_393330.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-81	Identity = 59.26%
AB1504	1	gi 78777016 ref YP_393331.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-98	Identity = 67.15%
	2	gi 34557521 ref NP_907336.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-71	Identity = 55.86%
	3	gi 34556484 ref NP_906299.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-67	Identity = 53.94%
	4	gi 34557234 ref NP_907049.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-65	Identity = 50.99%
	5	gi 32265724 ref NP_859756.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-60	Identity = 48.80%
AB1505	1	gi 78777017 ref YP_393332.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-122	Identity = 68.47%
AB1506	1	gi 78777018 ref YP_393333.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-90	Identity = 86.98%
	2	gi 34733215 gb AAQ81583.1	Sulfurospirillum multivorans	E-value = 7.00E-75	Identity = 70.98%
	3	gi 34556486 ref NP_906301.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-74	Identity = 71.05%
	4	gi 149194120 ref ZP_01871218.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-74	Identity = 71.88%
	5	gi 157164783 ref YP_001467446.1	Campylobacter concisus 13826	E-value = 5.00E-71	Identity = 70.37%
AB1507	1	gi 78777019 ref YP_393334.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 79.17%
	2	gi 34733214 gb AAQ81582.1	Sulfurospirillum multivorans	E-value = 0	Identity = 60.38%
	3	gi 34557518 ref NP_907333.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 57.63%
	4	gi 34556487 ref NP_906302.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 57.63%
	5	gi 48507 emb CAA37989.1	Wolinella succinogenes	E-value = 0	Identity = 57.63%
AB1509	1	gi 78777021 ref YP_393336.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-15	Identity = 66.22%
AB1510	1	gi 78777022 ref YP_393337.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-58	Identity = 57.71%
	2	gi 34557516 ref NP_907331.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-14	Identity = 28.50%
	3	gi 57504778 ref ZP_00370810.1	Campylobacter coli RM2228	E-value = 1.00E-12	Identity = 31.96%
	4	gi 148925676 ref ZP_01809364.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-12	Identity = 31.12%
	5	gi 51246836 ref YP_066720.1	Desulfotalea psychrophila LSv54	E-value = 4.00E-12	Identity = 26.53%
AB1511	1	gi 78777023 ref YP_393338.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-164	Identity = 51.88%
	2	gi 154174150 ref YP_001408944.1	Campylobacter curvus 525.92	E-value = 5.00E-123	Identity = 42.93%
	3	gi 57168293 ref ZP_00367432.1	Campylobacter coli RM2228	E-value = 1.00E-117	Identity = 40.97%
	4	gi 57238420 ref YP_179551.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-117	Identity = 40.79%
	5	gi 153952390 ref YP_001397493.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 6.00E-117	Identity = 40.97%
AB1512	1	gi 78777024 ref YP_393339.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-99	Identity = 51.75%

	2	gi 34557420 ref NP_907235.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-56	Identity = 37.46%
	3	gi 88809249 ref ZP_01124758.1	Synechococcus sp. WH 7805	E-value = 2.00E-49	Identity = 34.01%
	4	gi 51245627 ref YP_065511.1	Desulfotalea psychrophila LSv54	E-value = 4.00E-47	Identity = 33.33%
	5	gi 113954052 ref YP_729852.1	Synechococcus sp. CC9311	E-value = 2.00E-44	Identity = 31.32%
AB1513	1	gi 78777025 ref YP_393340.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-125	Identity = 53.83%
	2	gi 34557419 ref NP_907234.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-83	Identity = 37.97%
	3	gi 32265520 ref NP_859552.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-49	Identity = 31.63%
AB1514	1	gi 78777026 ref YP_393341.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-61	Identity = 68.49%
	2	gi 34557418 ref NP_907233.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-39	Identity = 42.58%
	3	gi 32265521 ref NP_859553.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-33	Identity = 40.85%
	4	gi 78222590 ref YP_384337.1	Geobacter metallireducens GS-15	E-value = 1.00E-26	Identity = 29.17%
	5	gi 110601676 ref ZP_01389851.1	Geobacter sp. FRC-32	E-value = 1.00E-26	Identity = 30.37%
AB1515	1	gi 149189827 ref ZP_01868107.1	Vibrio shilonii AK1	E-value = 2.00E-111	Identity = 57.49%
	2	gi 156975909 ref YP_001446816.1	Vibrio Harveyi ATCC BAA-1116	E-value = 4.00E-110	Identity = 55.12%
	3	gi 153835570 ref ZP_01988237.1	Vibrio Harveyi HY01	E-value = 4.00E-110	Identity = 55.61%
	4	gi 28899455 ref NP_799060.1	Vibrio parahaemolyticus RIMD 2210633	E-value = 1.00E-109	Identity = 55.37%
	5	gi 153839606 ref ZP_01992273.1	Vibrio parahaemolyticus AQ3810	E-value = 5.00E-109	Identity = 55.37%
AB1516	1	gi 149194144 ref ZP_01871242.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-07	Identity = 39.74%
	2	gi 154174362 ref YP_001408063.1	Campylobacter curvus 525.92	E-value = 1.00E-06	Identity = 38.10%
AB1517	1		*** No matches found ***		
AB1518	1	gi 154175018 ref YP_001408061.1	Campylobacter curvus 525.92	E-value = 1.00E-83	Identity = 45.08%
	2	gi 113971125 ref YP_734918.1	Shewanella sp. MR-4	E-value = 2.00E-83	Identity = 42.78%
	3	gi 113949655 ref ZP_01435300.1	Shewanella baltica OS195	E-value = 1.00E-82	Identity = 41.58%
	4	gi 126175262 ref YP_001051411.1	Shewanella baltica OS155	E-value = 2.00E-82	Identity = 41.58%
	5	gi 153001587 ref YP_001367268.1	Shewanella baltica OS185	E-value = 2.00E-82	Identity = 41.58%
AB1519	1	gi 78777017 ref YP_393332.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-121	Identity = 68.15%
AB1520	1	gi 78777018 ref YP_393333.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-90	Identity = 86.98%
	2	gi 34733215 gb AAQ81583.1	Sulfurospirillum multivorans	E-value = 7.00E-75	Identity = 70.98%
	3	gi 34556486 ref NP_906301.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-74	Identity = 71.05%
	4	gi 149194120 ref ZP_01871218.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-74	Identity = 71.88%
	5	gi 157164783 ref YP_001467446.1	Campylobacter concisus 13826	E-value = 5.00E-71	Identity = 70.37%
AB1521	1	gi 78777019 ref YP_393334.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 75.37%
	2	gi 34557518 ref NP_907333.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 56.30%
	3	gi 34556487 ref NP_906302.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 56.19%
	4	gi 48507 emb CAA37989.1	Wolinella succinogenes	E-value = 0	Identity = 56.19%
	5	gi 34733214 gb AAQ81582.1	Sulfurospirillum multivorans	E-value = 0	Identity = 57.78%
AB1522	1	gi 78777021 ref YP_393336.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-15	Identity = 69.86%
AB1523	1	gi 78777029 ref YP_393344.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-125	Identity = 65.85%
	2	gi 149194146 ref ZP_01871244.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-92	Identity = 54.77%
	3	gi 34557385 ref NP_907200.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-88	Identity = 48.41%
	4	gi 29336986 sp Q9PMF9 SELD_CAMJE	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-79	Identity = 47.79%
	5	gi 57238527 ref YP_179658.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-78	Identity = 47.20%
AB1524	1		*** No matches found ***		
AB1525	1	gi 110599704 ref ZP_01387939.1	Geobacter sp. FRC-32	E-value = 2.00E-07	Identity = 25.99%
AB1526	1	gi 21242357 ref NP_641939.1	Xanthomonas axonopodis pv. citri str. 306	E-value = 3.00E-43	Identity = 52.33%
	2	gi 110599707 ref ZP_01387942.1	Geobacter sp. FRC-32	E-value = 4.00E-42	Identity = 48.53%
	3	gi 87121962 ref ZP_01077847.1	Marinomonas sp. MED121	E-value = 1.00E-37	Identity = 46.84%
	4	gi 53715126 ref YP_101118.1	Bacteroides fragilis YCH46	E-value = 5.00E-27	Identity = 40.80%
	5	gi 90022547 ref YP_528374.1	Saccharophagus degradans 2-40	E-value = 4.00E-24	Identity = 41.27%

AB1527	1	gi 78047206 ref YP_363381.1	Xanthomonas campestris pv. vesicatoria str. 85-10	E-value = 7.00E-22	Identity = 51.81%
	2	gi 21242358 ref NP_641940.1	Xanthomonas axonopodis pv. citri str. 306	E-value = 1.00E-21	Identity = 51.81%
	3	gi 110599706 ref ZP_01387941.1	Geobacter sp. FRC-32	E-value = 3.00E-20	Identity = 45.24%
	4	gi 59714164 ref YP_206939.1	Vibrio fischeri ES114	E-value = 4.00E-09	Identity = 34.94%
AB1528	1		<b>*** No matches found ***</b>		
AB1529	1	gi 37525649 ref NP_928993.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 3.00E-16	Identity = 29.43%
AB1530	1	gi 153206714 ref ZP_01945555.1	Coxiella burnetii 'MSU Goat Q177'	E-value = 1.00E-14	Identity = 34.00%
	2	gi 95926610 ref ZP_01309390.1	Coxiella burnetii RSA 331	E-value = 2.00E-14	Identity = 34.00%
	3	gi 29654343 ref NP_820035.1	Coxiella burnetii RSA 493	E-value = 2.00E-14	Identity = 34.00%
	4	gi 32453612 ref NP_861818.1	Enterobacteria phage RB69	E-value = 2.00E-14	Identity = 31.79%
	5	gi 56750786 ref YP_171487.1	Synechococcus elongatus PCC 6301	E-value = 3.00E-14	Identity = 35.46%
AB1531	1		<b>*** No matches found ***</b>		
AB1532	1		<b>*** No matches found ***</b>		
AB1533	1	seIA gi 78777030 ref YP_393345.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-148	Identity = 63.45%
	2	gi 149194139 ref ZP_01871237.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-122	Identity = 58.52%
	3	gi 34557236 ref NP_907051.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-119	Identity = 50.23%
	4	gi 154148567 ref YP_001406339.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-111	Identity = 51.02%
	5	gi 154175332 ref YP_001408945.1	Campylobacter curvus 525.92	E-value = 6.00E-108	Identity = 49.44%
AB1534	1	seIB gi 78777031 ref YP_393346.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 60.76%
	2	gi 34557235 ref NP_907050.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-152	Identity = 49.84%
	3	gi 154174928 ref YP_001408946.1	Campylobacter curvus 525.92	E-value = 8.00E-141	Identity = 45.89%
	4	gi 32266240 ref NP_860272.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-140	Identity = 44.18%
	5	gi 157165277 ref YP_001466209.1	Campylobacter concisus 13826	E-value = 7.00E-139	Identity = 47.05%
AB1535	1	gi 110639876 ref YP_680086.1	Cytophaga hutchinsonii ATCC 33406	E-value = 7.00E-57	Identity = 33.73%
	2	gi 124008233 ref ZP_01692930.1	Microscilla marina ATCC 23134	E-value = 4.00E-54	Identity = 32.81%
	3	gi 118577360 ref YP_899600.1	Pelobacter propionicus DSM 2379	E-value = 8.00E-49	Identity = 31.34%
	4	gi 134288383 ref YP_001110546.1	Burkholderia vietnamiensis G4	E-value = 5.00E-45	Identity = 28.86%
	5	gi 157158381 ref YP_001464360.1	Escherichia coli E24377A	E-value = 8.00E-43	Identity = 29.33%
AB1536	1	gi 124008100 ref ZP_01692798.1	Microscilla marina ATCC 23134	E-value = 7.00E-36	Identity = 37.65%
	2	gi 149279572 ref ZP_01885701.1	Pedobacter sp. BAL39	E-value = 1.00E-33	Identity = 32.77%
	3	gi 29348519 ref NP_812022.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 4.00E-30	Identity = 32.20%
	4	gi 146298424 ref YP_001193015.1	Flavobacterium johnsoniae UW101	E-value = 4.00E-29	Identity = 34.87%
AB1537	1		<b>*** No matches found ***</b>		
AB1538	1	gi 149279572 ref ZP_01885701.1	Pedobacter sp. BAL39	E-value = 2.00E-34	Identity = 31.76%
	2	gi 124008100 ref ZP_01692798.1	Microscilla marina ATCC 23134	E-value = 6.00E-34	Identity = 36.76%
	3	gi 146298424 ref YP_001193015.1	Flavobacterium johnsoniae UW101	E-value = 2.00E-31	Identity = 34.84%
	4	gi 29348519 ref NP_812022.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 8.00E-30	Identity = 30.79%
	5	gi 110639215 ref YP_679424.1	Cytophaga hutchinsonii ATCC 33406	E-value = 1.00E-21	Identity = 29.97%
AB1539	1		<b>*** No matches found ***</b>		
AB1540	1	gi 78777190 ref YP_393505.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-32	Identity = 33.88%
AB1541	1		<b>*** No matches found ***</b>		
AB1542	1	gi 87123470 ref ZP_01079321.1	Synechococcus sp. RS9917	E-value = 2.00E-25	Identity = 36.88%
	2	gi 33239495 ref NP_874437.1	Prochlorococcus marinus subsp. marinus str. CCMP1375	E-value = 1.00E-24	Identity = 35.76%
	3	gi 123967579 ref YP_001008437.1	Prochlorococcus marinus str. AS9601	E-value = 3.00E-24	Identity = 32.52%
	4	gi 126695382 ref YP_001090268.1	Prochlorococcus marinus str. MIT 9301	E-value = 3.00E-24	Identity = 33.13%
	5	gi 123965283 ref YP_001010364.1	Prochlorococcus marinus str. MIT 9515	E-value = 3.00E-24	Identity = 32.52%
AB1543	1	gi 34558072 ref NP_907887.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-38	Identity = 28.81%
	2	gi 149194867 ref ZP_01871961.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-34	Identity = 33.12%
	3	gi 32267318 ref NP_861350.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-32	Identity = 29.18%



	4	gi 18310647 ref NP_562581.1	Clostridium perfringens str. 13	E-value = 8.00E-28	Identity = 28.45%
	5	gi 464446118 ref YP_007483.1	Candidatus Protochlamydia amoebophila UWE25	E-value = 5.00E-27	Identity = 29.43%
AB1544	1		<b>*** No matches found ***</b>		
AB1545	1	gi 34557884 ref NP_907699.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-103	Identity = 39.20%
	2	gi 89095243 ref ZP_01168165.1	Oceanospirillum sp. MED92	E-value = 3.00E-94	Identity = 36.53%
	3	gi 95931153 ref ZP_01313877.1	Desulfuromonas acetoxidans DSM 684	E-value = 9.00E-93	Identity = 35.26%
	4	gi 42779774 ref NP_977021.1	Bacillus cereus ATCC 10987	E-value = 3.00E-56	Identity = 29.53%
	5	gi 30018813 ref NP_830444.1	Bacillus cereus ATCC 14579	E-value = 5.00E-56	Identity = 29.19%
AB1546	1	<i>pdxH</i> gi 67922765 ref ZP_00516266.1	Crocospaera watsonii WH 8501	E-value = 3.00E-72	Identity = 66.51%
	2	gi 126659758 ref ZP_01730885.1	Cyanothece sp. CCY0110	E-value = 8.00E-72	Identity = 64.62%
	3	gi 120553098 ref YP_957449.1	Marinobacter aquaeolei VT8	E-value = 1.00E-69	Identity = 58.96%
	4	gi 149377548 ref ZP_01895288.1	Marinobacter algicola DG893	E-value = 4.00E-68	Identity = 57.55%
	5	gi 126665506 ref ZP_01736488.1	Marinobacter sp. ELB17	E-value = 6.00E-68	Identity = 58.14%
AB1547	1		<b>*** No matches found ***</b>		
AB1548	1	<i>dbpA</i> gi 89075877 ref ZP_01162256.1	Photobacterium sp. SKA34	E-value = 2.00E-115	Identity = 47.35%
	2	gi 90578403 ref ZP_01234214.1	Vibrio angustum S14	E-value = 2.00E-114	Identity = 47.12%
	3	gi 118746345 ref ZP_01594289.1	Geobacter lovleyi SZ	E-value = 5.00E-113	Identity = 44.59%
	4	gi 90417199 ref ZP_01225126.1	marine gamma proteobacterium HTCC2207	E-value = 7.00E-112	Identity = 45.47%
	5	gi 109896916 ref YP_660171.1	Pseudoalteromonas atlantica T6c	E-value = 8.00E-112	Identity = 43.78%
AB1549	1	gi 154174817 ref YP_001408117.1	Campylobacter curvus 525.92	E-value = 2.00E-29	Identity = 43.03%
	2	gi 118474701 ref YP_891698.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-29	Identity = 51.70%
	3	gi 34558102 ref NP_907917.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-29	Identity = 49.10%
	4	gi 78777892 ref YP_394207.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-29	Identity = 45.52%
	5	gi 157164921 ref YP_001466922.1	Campylobacter concisus 13826	E-value = 2.00E-28	Identity = 42.17%
AB1550	1	gi 118581328 ref YP_902578.1	Pelobacter propionicus DSM 2379	E-value = 2.00E-35	Identity = 39.82%
	2	gi 89093264 ref ZP_01166214.1	Oceanospirillum sp. MED92	E-value = 4.00E-35	Identity = 35.51%
	3	gi 145619338 ref ZP_01775389.1	Geobacter bemidjensis Bem	E-value = 2.00E-34	Identity = 39.01%
	4	gi 118744752 ref ZP_01592740.1	Geobacter lovleyi SZ	E-value = 2.00E-33	Identity = 41.59%
	5	gi 78224174 ref YP_385921.1	Geobacter metallireducens GS-15	E-value = 4.00E-33	Identity = 41.33%
AB1551	1		<b>*** No matches found ***</b>		
AB1552	1	<i>htpG</i> gi 152993477 ref YP_001359198.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 65.57%
	2	gi 34558046 ref NP_907861.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-180	Identity = 56.34%
	3	gi 42527980 ref NP_973078.1	Treponema denticola ATCC 35405	E-value = 1.00E-167	Identity = 52.39%
	4	gi 118475345 ref YP_892126.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-165	Identity = 53.29%
	5	gi 109948000 ref YP_665228.1	Helicobacter acinonychis str. Sheeba	E-value = 3.00E-164	Identity = 52.52%
AB1553	1	<i>katG</i> gi 152995613 ref YP_001340448.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 67.21%
	2	gi 86139782 ref ZP_01058348.1	Roseobacter sp. MED193	E-value = 0	Identity = 68.26%
	3	gi 88800396 ref ZP_01115961.1	Reinekea sp. MED297	E-value = 0	Identity = 68.49%
	4	gi 109646677 ref ZP_01370581.1	Desulfitobacterium hafniense DCB-2	E-value = 0	Identity = 67.17%
	5	gi 110597767 ref ZP_01386051.1	Chlorobium ferrooxidans DSM 13031	E-value = 0	Identity = 68.67%
AB1555	1	<i>ciaB</i> gi 152991765 ref YP_001357486.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-148	Identity = 46.19%
	2	gi 152991370 ref YP_001357092.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-144	Identity = 46.89%
	3	gi 34557578 ref NP_907393.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-138	Identity = 43.54%
	4	gi 149195062 ref ZP_01872154.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-118	Identity = 43.42%
	5	gi 14547127 emb CAC42493.1	Campylobacter fetus	E-value = 1.00E-113	Identity = 40.33%
AB1557	1	gi 57240807 ref ZP_00368755.1	Campylobacter lari RM2100	E-value = 5.00E-36	Identity = 53.06%
	2	gi 118475074 ref YP_892219.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-32	Identity = 49.02%
	3	gi 15792709 ref NP_282532.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-33	Identity = 47.95%
	4	gi 148926740 ref ZP_01810420.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-31	Identity = 47.26%

AB1558	5	gi 86152414 ref ZP_01070622.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-31	Identity = 47.95%
	1	gi 91227973 ref ZP_01262083.1	Vibrio alginolyticus 12G01	E-value = 2.00E-94	Identity = 28.17%
	2	gi 28898385 ref NP_797990.1	Vibrio parahaemolyticus RIMD 2210633	E-value = 5.00E-94	Identity = 28.30%
	3	gi 149191345 ref ZP_01869598.1	Vibrio shilonii AK1	E-value = 2.00E-93	Identity = 28.51%
	4	gi 153835226 ref ZP_01987893.1	Vibrio harveyi HY01	E-value = 3.00E-93	Identity = 27.70%
	5	gi 37679826 ref NP_934435.1	Vibrio vulnificus YJ016	E-value = 3.00E-93	Identity = 27.42%
AB1561	1	gi 152994033 ref YP_001359754.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-31	Identity = 53.08%
	2	gi 149197336 ref ZP_01874387.1	Lentisphaera araneosa HTCC2155	E-value = 4.00E-22	Identity = 42.31%
	3	gi 78777191 ref YP_393506.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-20	Identity = 38.19%
	4	gi 24216675 ref NP_714156.1	Leptospira interrogans serovar Lai str. 56601	E-value = 7.00E-20	Identity = 44.74%
	5	gi 46446613 ref YP_007978.1	Candidatus Protochlamydia amoebophila UWE25	E-value = 2.00E-19	Identity = 39.26%
AB1562	1	gi 78777107 ref YP_393422.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 58.14%
	2	gi 117923718 ref YP_864335.1	Magnetococcus sp. MC-1	E-value = 0	Identity = 42.19%
	3	gi 152989945 ref YP_001355667.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 45.57%
	4	gi 94263998 ref ZP_01287799.1	delta proteobacterium MLMS-1	E-value = 0	Identity = 40.90%
	5	gi 94267023 ref ZP_01290667.1	delta proteobacterium MLMS-1	E-value = 0	Identity = 40.79%
AB1563	1		<b>*** No matches found ***</b>		
AB1564	1	gi 156109447 gb EDO11192.1	Bacteroides ovatus ATCC 8483	E-value = 3.00E-48	Identity = 49.32%
	2	gi 150005751 ref YP_001300495.1	Bacteroides vulgatus ATCC 8482	E-value = 8.00E-47	Identity = 48.11%
	3	gi 154493707 ref ZP_02033027.1	Parabacteroides merdae ATCC 43184	E-value = 1.00E-46	Identity = 42.66%
	4	gi 150010031 ref YP_001304774.1	Parabacteroides distasonis ATCC 8503	E-value = 3.00E-45	Identity = 45.73%
	5	gi 53714374 ref YP_100366.1	Bacteroides fragilis YCH46	E-value = 7.00E-45	Identity = 45.21%
AB1565	1	gi 32035604 ref ZP_00135525.1	Actinobacillus pleuropneumoniae serovar 1 str. 4074	E-value = 4.00E-44	Identity = 62.58%
	2	gi 50120130 ref YP_049297.1	Erwinia carotovora subsp. atroseptica SCR11043	E-value = 3.00E-43	Identity = 61.94%
	3	gi 152969034 ref YP_001334143.1	Klebsiella pneumoniae subsp. pneumoniae MGH 78578	E-value = 3.00E-42	Identity = 60.65%
	4	gi 33151593 ref NP_872946.1	Haemophilus ducreyi 35000HP	E-value = 5.00E-42	Identity = 60.65%
	5	gi 146310621 ref YP_001175695.1	Enterobacter sp. 638	E-value = 2.00E-41	Identity = 60.00%
AB1566	1	gi 91776543 ref YP_546299.1	Methylobacillus flagellatus KT	E-value = 4.00E-31	Identity = 47.13%
	2	gi 152990897 ref YP_001356619.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-13	Identity = 28.95%
	3	gi 15644933 ref NP_207103.1	Helicobacter pylori 26695	E-value = 3.00E-07	Identity = 27.46%
	4	gi 108562732 ref YP_627048.1	Helicobacter pylori HPAG1	E-value = 3.00E-07	Identity = 26.94%
	5	gi 15611359 ref NP_223010.1	Helicobacter pylori J99	E-value = 1.00E-06	Identity = 26.94%
AB1567	1	gi 149176496 ref ZP_01855109.1	Planctomyces maris DSM 8797	E-value = 8.00E-83	Identity = 44.38%
	2	gi 119945081 ref YP_942761.1	Psychromonas ingrahamii 37	E-value = 5.00E-80	Identity = 44.26%
	3	gi 124007271 ref ZP_01691979.1	Microscilla marina ATCC 23134	E-value = 3.00E-79	Identity = 44.70%
	4	gi 126651592 ref ZP_01723795.1	Bacillus sp. B14905	E-value = 1.00E-75	Identity = 42.46%
	5	gi 16078046 ref NP_388862.1	Bacillus subtilis subsp. subtilis str. 168	E-value = 6.00E-75	Identity = 43.48%
AB1568	1	gi 152993197 ref YP_001358918.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-68	Identity = 51.94%
	2	gi 29611533 ref NP_818986.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 2.00E-62	Identity = 49.08%
	3	gi 78188491 ref YP_378829.1	Chlorobium chlorochromatii CaD3	E-value = 1.00E-53	Identity = 43.68%
	4	gi 53711692 ref YP_097684.1	Bacteroides fragilis YCH46	E-value = 5.00E-53	Identity = 42.50%
	5	gi 60679934 ref YP_210078.1	Bacteroides fragilis NCTC 9343	E-value = 2.00E-35	Identity = 39.38%
AB1569	1	gi 28371733 gb AAO38240.1	Vibrio fischeri	E-value = 7.00E-15	Identity = 25.90%
AB1570	1	gi 152980668 ref YP_001352035.1	Janthinobacterium sp. Marseille	E-value = 1.00E-65	Identity = 56.31%
	2	gi 148265552 ref YP_001232258.1	Geobacter uraniumreducens Rf4	E-value = 1.00E-59	Identity = 54.90%
	3	gi 52142658 ref YP_084170.1	Bacillus cereus E33L	E-value = 1.00E-42	Identity = 43.75%
	4	gi 75761540 ref ZP_00741499.1	Bacillus thuringiensis serovar israelensis ATCC 35646	E-value = 1.00E-42	Identity = 48.96%
	5	gi 119486018 ref ZP_01620080.1	Lyngbya sp. PCC 8106	E-value = 2.00E-42	Identity = 43.30%
AB1572	1	gi 95929661 ref ZP_01312403.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-76	Identity = 61.29%

	2	gi 114775476 ref ZP_01451044.1	Mariprofundus ferrooxydans PV-1	E-value = 2.00E-76	Identity = 62.84%
	3	gi 113949368 ref ZP_01435017.1	Shewanella baltica OS195	E-value = 3.00E-72	Identity = 60.37%
	4	gi 146293955 ref YP_001184379.1	Shewanella putrefaciens CN-32	E-value = 5.00E-72	Identity = 60.37%
	5	gi 145300809 ref YP_001143650.1	Aeromonas salmonicida subsp. salmonicida A449	E-value = 1.00E-71	Identity = 58.99%
AB1573	1	gi 116052210 ref YP_788946.1	Pseudomonas aeruginosa UCBPP-PA14	E-value = 5.00E-144	Identity = 39.33%
	2	gi 126168979 gb EAZ54490.1	Pseudomonas aeruginosa C3719	E-value = 1.00E-143	Identity = 41.56%
	3	gi 84319024 ref ZP_00967431.1	Pseudomonas aeruginosa C3719	E-value = 1.00E-143	Identity = 41.56%
	4	gi 15599363 ref NP_252857.1	Pseudomonas aeruginosa PAO1	E-value = 1.00E-143	Identity = 41.56%
	5	gi 126196230 gb EAZ60293.1	Pseudomonas aeruginosa 2192	E-value = 3.00E-143	Identity = 41.41%
AB1574	1	<i>hicA</i> gi 120555578 ref YP_959929.1	Marinobacter aquaeolei VT8	E-value = 1.00E-10	Identity = 54.05%
	2	gi 26990605 ref NP_746030.1	Pseudomonas putida KT2440	E-value = 1.00E-09	Identity = 50.00%
	3	gi 33152053 ref NP_873406.1	Haemophilus ducreyi 3500HP	E-value = 4.00E-09	Identity = 48.65%
	4	gi 149115898 ref ZP_01842634.1	Shewanella baltica OS223	E-value = 4.00E-09	Identity = 48.65%
	5	gi 113948537 ref ZP_01434196.1	Shewanella baltica OS195	E-value = 3.00E-08	Identity = 48.65%
AB1575	1	<i>hicB</i> gi 146298195 ref YP_001192786.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-25	Identity = 59.80%
	2	gi 91203238 emb CAJ72877.1	Candidatus Kuenenia stuttgartiensis	E-value = 7.00E-21	Identity = 41.67%
	3	gi 92113802 ref YP_573730.1	Chromohalobacter salexigens DSM 3043	E-value = 2.00E-20	Identity = 44.90%
	4	gi 119510524 ref ZP_01629655.1	Nodularia spumigena CCY9414	E-value = 2.00E-19	Identity = 43.69%
	5	gi 26990604 ref NP_746029.1	Pseudomonas putida KT2440	E-value = 2.00E-19	Identity = 45.26%
AB1576	1	gi 34557007 ref NP_906822.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-32	Identity = 30.06%
	2	gi 34557769 ref NP_907584.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-25	Identity = 26.81%
	3	gi 90021090 ref YP_526917.1	Saccharophagus degradans 2-40	E-value = 2.00E-18	Identity = 25.16%
	4	gi 156112456 gb EDO14201.1	Bacteroides ovatus ATCC 8483	E-value = 2.00E-14	Identity = 25.00%
	5	gi 154493462 ref ZP_02032782.1	Parabacteroides merdae ATCC 43184	E-value = 4.00E-12	Identity = 25.00%
AB1577	1	gi 34557006 ref NP_906821.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-22	Identity = 39.47%
	2	gi 34557770 ref NP_907585.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-15	Identity = 40.67%
	3	gi 30248569 ref NP_840639.1	Nitrosomonas europaea ATCC 19718	E-value = 4.00E-14	Identity = 32.26%
	4	gi 30250072 ref NP_842142.1	Nitrosomonas europaea ATCC 19718	E-value = 5.00E-13	Identity = 30.72%
	5	gi 70731436 ref YP_261177.1	Pseudomonas fluorescens Pf-5	E-value = 6.00E-13	Identity = 31.03%
AB1578	1	<i>speB</i> gi 42521974 ref NP_967354.1	Bdellovibrio bacteriovorus HD100	E-value = 9.00E-70	Identity = 43.11%
	2	gi 150026245 ref YP_001297071.1	Flavobacterium psychrophilum JIP02/86	E-value = 4.00E-69	Identity = 43.96%
	3	gi 108761940 ref YP_632602.1	Myxococcus xanthus DK 1622	E-value = 7.00E-68	Identity = 42.64%
	4	gi 23128506 ref ZP_00110351.1	Nostoc punctiforme PCC 73102	E-value = 2.00E-67	Identity = 43.98%
	5	gi 119510848 ref ZP_01629973.1	Nodularia spumigena CCY9414	E-value = 7.00E-66	Identity = 41.34%
AB1579	1	<i>leuA2</i> gi 15893565 ref NP_346914.1	Clostridium acetobutylicum ATCC 824	E-value = 1.00E-135	Identity = 53.58%
	2	gi 21674916 ref NP_662981.1	Chlorobium tepidum TLS	E-value = 2.00E-135	Identity = 50.93%
	3	gi 13472480 ref NP_104047.1	Mesorhizobium loti MAFF303099	E-value = 3.00E-134	Identity = 51.53%
	4	gi 22001756 sp Q8UD63 LEU1_AGRT5	Agrobacterium tumefaciens str. C58	E-value = 2.00E-133	Identity = 50.94%
	5	gi 38258153 sp Q8FZC4 LEU1_BRUSU	Brucella suis	E-value = 4.00E-133	Identity = 51.29%
AB1580	1	gi 149194303 ref ZP_01871400.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-33	Identity = 37.83%
	2	gi 88799777 ref ZP_01115351.1	Reinekea sp. MED297	E-value = 4.00E-28	Identity = 27.41%
	3	gi 120556759 ref YP_961110.1	Marinobacter aquaeolei VT8	E-value = 2.00E-25	Identity = 27.78%
	4	gi 149377021 ref ZP_01894772.1	Marinobacter algicola DG893	E-value = 3.00E-22	Identity = 25.64%
	5	gi 95930609 ref ZP_01313343.1	Desulfuromonas acetoxidans DSM 684	E-value = 8.00E-22	Identity = 26.89%
AB1581	1	gi 121540582 ref ZP_01672343.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 2.00E-27	Identity = 54.13%
	2	gi 78223703 ref YP_385450.1	Geobacter metallireducens GS-15	E-value = 6.00E-26	Identity = 57.28%
	3	gi 148265402 ref YP_001232108.1	Geobacter uraniumreducens Rf4	E-value = 3.00E-24	Identity = 56.31%
	4	gi 119511253 ref ZP_01630369.1	Nodularia spumigena CCY9414	E-value = 1.00E-23	Identity = 53.40%
	5	gi 78773873 gb ABB51222.1	Arthrospira platensis	E-value = 2.00E-23	Identity = 54.90%

AB1582	1	gi 121540581 ref ZP_01672342.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 1.00E-07	Identity = 40.91%
	2	gi 116329237 ref YP_798957.1	Leptospira borgpetersenii serovar Hardjo-bovis L550	E-value = 9.00E-06	Identity = 42.86%
	3	gi 119511254 ref ZP_01630370.1	Nodularia spumigena CCY9414	E-value = 9.00E-06	Identity = 40.00%
AB1583	1	gi 34557928 ref NP_907743.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-19	Identity = 26.06%
	2	gi 118475050 ref YP_892365.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-19	Identity = 28.47%
	3	gi 17230117 ref NP_486665.1	Nostoc sp. PCC 7120	E-value = 1.00E-15	Identity = 25.76%
	4	gi 146301060 ref YP_001195651.1	Flavobacterium johnsoniae UW101	E-value = 7.00E-12	Identity = 26.07%
	5	gi 150024940 ref YP_001295766.1	Flavobacterium psychrophilum JIP02/86	E-value = 2.00E-11	Identity = 26.56%
AB1584	1	gi 34557929 ref NP_907744.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-74	Identity = 28.91%
	2	gi 78356643 ref YP_388092.1	Desulfovibrio desulfuricans G20	E-value = 7.00E-69	Identity = 30.47%
	3	gi 28192385 gb AAL65282.1	Pseudomonas fluorescens	E-value = 1.00E-59	Identity = 25.34%
	4	gi 17231518 ref NP_488066.1	Nostoc sp. PCC 7120	E-value = 6.00E-58	Identity = 28.81%
	5	gi 83592201 ref YP_425953.1	Rhodospirillum rubrum ATCC 11170	E-value = 1.00E-57	Identity = 28.42%
AB1585	1	gi 153885654 ref ZP_02006810.1	Ralstonia pickettii 12D	E-value = 7.00E-73	Identity = 69.79%
	2	gi 121527722 ref ZP_01660336.1	Ralstonia pickettii 12J	E-value = 7.00E-73	Identity = 69.79%
	3	gi 134095671 ref YP_001100746.1	Herminiimonas arsenicoxydans	E-value = 1.00E-72	Identity = 68.75%
	4	gi 83749054 ref ZP_00946060.1	Ralstonia solanacearum UW551	E-value = 1.00E-72	Identity = 70.31%
	5	gi 152981017 ref YP_001354279.1	Janthinobacterium sp. Marseille	E-value = 2.00E-71	Identity = 67.71%
AB1586	1	gi 153801520 ref ZP_01956106.1	Vibrio cholerae MZO-3	E-value = 1.00E-112	Identity = 52.66%
	2	gi 15640294 ref NP_229921.1	Vibrio cholerae O1 biovar eltor str. N16961	E-value = 2.00E-112	Identity = 52.66%
	3	gi 121727056 ref ZP_01680247.1	Vibrio cholerae V52	E-value = 2.00E-112	Identity = 52.66%
	4	gi 150423676 gb EDN15618.1	Vibrio cholerae AM-19226	E-value = 3.00E-112	Identity = 52.66%
	5	gi 153818301 ref ZP_01970968.1	Vibrio cholerae NCTC 8457	E-value = 4.00E-112	Identity = 52.39%
AB1587	1	gi 91791842 ref YP_561493.1	Shewanella denitrificans OS217	E-value = 4.00E-119	Identity = 68.30%
	2	gi 157375310 ref YP_001473910.1	Shewanella sediminis HAW-EB3	E-value = 4.00E-119	Identity = 68.30%
	3	gi 114564713 ref YP_752227.1	Shewanella frigidimarina NCIMB 400	E-value = 3.00E-118	Identity = 67.97%
	4	gi 127512903 ref YP_001094100.1	Shewanella loihica PV-4	E-value = 3.00E-118	Identity = 66.67%
	5	gi 24375675 ref NP_719718.1	Shewanella oneidensis MR-1	E-value = 4.00E-118	Identity = 67.32%
AB1588	1	gi 154148744 ref YP_001406896.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-48	Identity = 54.27%
	2	gi 106894504 ref ZP_01361623.1	Clostridium sp. OhILAs	E-value = 7.00E-26	Identity = 39.47%
	3	gi 150400151 ref YP_001323918.1	Methanococcus vannielii SB	E-value = 8.00E-26	Identity = 37.13%
	4	gi 121534575 ref ZP_01666397.1	Thermosinus carboxydivorans Nor1	E-value = 9.00E-26	Identity = 32.72%
	5	gi 154503451 ref ZP_02040511.1	Ruminococcus gnavus ATCC 29149	E-value = 1.00E-24	Identity = 36.92%
AB1589	1	gi 152991195 ref YP_001356917.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-33	Identity = 46.20%
	2	gi 78776774 ref YP_393089.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-30	Identity = 42.95%
	3	gi 152992311 ref YP_001358032.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-29	Identity = 44.38%
	4	gi 34557131 ref NP_906946.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-28	Identity = 40.96%
	5	gi 86158564 ref YP_465349.1	Anaeromyxobacter dehalogenans 2CP-C	E-value = 2.00E-19	Identity = 34.57%
AB1590	1	gi 2644959 emb CAA05764.1	Wolinella succinogenes	E-value = 1.00E-172	Identity = 68.12%
	2	gi 34557077 ref NP_906892.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-172	Identity = 68.12%
	3	gi 32266221 ref NP_860253.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-164	Identity = 62.14%
	4	gi 118474906 ref YP_892771.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-163	Identity = 61.71%
	5	gi 109947600 ref YP_664828.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-162	Identity = 61.93%
AB1591	1	gi 34557780 ref NP_907595.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-39	Identity = 40.99%
	2	gi 118475245 ref YP_891579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-31	Identity = 35.00%
	3	gi 15792806 ref NP_282629.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-30	Identity = 35.75%
	4	gi 57238514 ref YP_179645.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-30	Identity = 35.75%
	5	gi 78778185 ref YP_394500.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-30	Identity = 39.11%
AB1592	1	gi 90023443 ref YP_529270.1	Saccharophagus degradans 2-40	E-value = 2.00E-14	Identity = 27.72%

AB1593	1	gi 88704151 ref ZP_01101866.1	gamma proteobacterium KT 71	E-value = 9.00E-148	Identity = 59.13%
	2	gi 146305176 ref YP_001185641.1	Pseudomonas mendocina ymp	E-value = 7.00E-139	Identity = 57.39%
	3	gi 152996664 ref YP_001341499.1	Marinomonas sp. MWYL1	E-value = 2.00E-133	Identity = 54.37%
	4	gi 146280590 ref YP_001170743.1	Pseudomonas stutzeri A1501	E-value = 6.00E-130	Identity = 58.32%
	5	gi 28872605 ref NP_795224.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 3.00E-126	Identity = 50.96%
AB1594	1	gi 152993338 ref YP_001359059.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-80	Identity = 64.98%
	2	gi 152990953 ref YP_001356675.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-75	Identity = 59.76%
	3	gi 78777589 ref YP_393904.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-74	Identity = 63.60%
	4	gi 34556949 ref NP_906764.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-74	Identity = 61.67%
	5	gi 157164087 ref YP_001466355.1	Campylobacter concisus 13826	E-value = 1.00E-68	Identity = 58.41%
AB1595	1	gi 152993339 ref YP_001359060.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-99	Identity = 60.13%
	2	gi 152990955 ref YP_001356677.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-94	Identity = 54.22%
	3	gi 78777590 ref YP_393905.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-93	Identity = 57.56%
	4	gi 118474647 ref YP_892650.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-87	Identity = 56.03%
	5	gi 157164479 ref YP_001466354.1	Campylobacter concisus 13826	E-value = 3.00E-86	Identity = 54.69%
AB1596	1	gi 152990956 ref YP_001356678.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-51	Identity = 66.88%
	2	gi 152993342 ref YP_001359063.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-41	Identity = 58.54%
	3	gi 57505316 ref ZP_00371245.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-38	Identity = 52.35%
	4	gi 57168716 ref ZP_00367848.1	Campylobacter coli RM2228	E-value = 2.00E-37	Identity = 52.35%
	5	gi 153951916 ref YP_001397369.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-37	Identity = 52.35%
AB1597	1	gi 152990957 ref YP_001356679.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-24	Identity = 31.92%
	2	gi 152993345 ref YP_001359066.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-23	Identity = 33.33%
	3	gi 57168717 ref ZP_00367849.1	Campylobacter coli RM2228	E-value = 5.00E-22	Identity = 31.94%
	4	gi 78777593 ref YP_393908.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-21	Identity = 30.95%
	5	gi 57240735 ref ZP_00368683.1	Campylobacter lari RM2100	E-value = 6.00E-21	Identity = 27.63%
AB1598	1	gi 78777594 ref YP_393909.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-30	Identity = 46.67%
	2	gi 157164304 ref YP_001466351.1	Campylobacter concisus 13826	E-value = 4.00E-28	Identity = 46.55%
	3	gi 152990958 ref YP_001356680.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-27	Identity = 45.00%
	4	gi 34556944 ref NP_906759.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-26	Identity = 44.51%
	5	gi 154174275 ref YP_001408803.1	Campylobacter curvus 525.92	E-value = 2.00E-25	Identity = 44.87%
AB1599	1	gi 34556943 ref NP_906758.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-97	Identity = 45.39%
	2	gi 152990959 ref YP_001356681.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-90	Identity = 43.85%
	3	gi 154173809 ref YP_001408804.1	Campylobacter curvus 525.92	E-value = 1.00E-89	Identity = 43.19%
	4	gi 157164610 ref YP_001466350.1	Campylobacter concisus 13826	E-value = 3.00E-88	Identity = 42.73%
	5	gi 118474869 ref YP_892654.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-87	Identity = 44.44%
AB1600	1	gi 34556942 ref NP_906757.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-10	Identity = 31.33%
AB1601	1	gi 152990961 ref YP_001356683.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-35	Identity = 59.69%
	2	gi 34556941 ref NP_906756.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-34	Identity = 58.59%
	3	gi 32265931 ref NP_859963.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-28	Identity = 52.38%
	4	gi 154148539 ref YP_001406271.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-27	Identity = 47.73%
	5	gi 118474578 ref YP_892656.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-26	Identity = 51.54%
AB1602	1	gi 34556940 ref NP_906755.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-34	Identity = 45.41%
	2	gi 152993352 ref YP_001359073.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-34	Identity = 52.43%
	3	gi 109947171 ref YP_664399.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-29	Identity = 43.09%
	4	gi 57240730 ref ZP_00368678.1	Campylobacter lari RM2100	E-value = 2.00E-28	Identity = 48.07%
	5	gi 108563493 ref YP_627809.1	Helicobacter pylori HPAG1	E-value = 2.00E-28	Identity = 42.02%
AB1603	1	gi 118475189 ref YP_892658.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-25	Identity = 56.35%
	2	gi 34556939 ref NP_906754.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-24	Identity = 54.76%
	3	gi 152993353 ref YP_001359074.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-24	Identity = 58.20%

	4	gi 152990963 ref YP_001356685.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-24	Identity = 53.97%
	5	gi 157163910 ref YP_001466346.1	Campylobacter concisus 13826	E-value = 4.00E-23	Identity = 50.00%
AB1605	1	<i>atpD</i> gi 153951038 ref YP_001397361.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 0	Identity = 82.80%
	2	gi 154173677 ref YP_001408809.1	Campylobacter curvus 525.92	E-value = 0	Identity = 83.23%
	3	gi 157164647 ref YP_001466345.1	Campylobacter concisus 13826	E-value = 0	Identity = 83.01%
	4	gi 34556938 ref NP_906753.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 83.23%
	5	gi 57240728 ref ZP_00368676.1	Campylobacter lari RM2100	E-value = 0	Identity = 83.23%
AB1606	1	<i>atpG</i> gi 34556937 ref NP_906752.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-81	Identity = 57.09%
	2	gi 152990965 ref YP_001356687.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-81	Identity = 57.29%
	3	gi 154174108 ref YP_001408810.1	Campylobacter curvus 525.92	E-value = 2.00E-77	Identity = 54.24%
	4	gi 157164986 ref YP_001466344.1	Campylobacter concisus 13826	E-value = 7.00E-77	Identity = 53.22%
	5	gi 118474696 ref YP_892660.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-76	Identity = 54.39%
AB1607	1	<i>atpA</i> gi 78777602 ref YP_393917.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 78.09%
	2	gi 34556936 ref NP_906751.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 77.80%
	3	gi 152990966 ref YP_001356688.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 76.59%
	4	gi 32265926 ref NP_859958.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 76.19%
	5	gi 118474260 ref YP_892661.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 76.59%
AB1608	1	<i>atpH</i> gi 157163953 ref YP_001466342.1	Campylobacter concisus 13826	E-value = 7.00E-31	Identity = 43.18%
	2	gi 154175315 ref YP_001408812.1	Campylobacter curvus 525.92	E-value = 1.00E-30	Identity = 42.61%
	3	gi 118474956 ref YP_892662.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-29	Identity = 42.05%
	4	gi 34556935 ref NP_906750.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-26	Identity = 36.57%
	5	gi 154148856 ref YP_001406265.1	Campylobacter hominis ATCC BAA-381	E-value = 6.00E-25	Identity = 40.34%
AB1609	1	<i>atpF</i> gi 34556934 ref NP_906749.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-24	Identity = 44.12%
	2	gi 32265924 ref NP_859956.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-20	Identity = 35.09%
	3	gi 157164079 ref YP_001466341.1	Campylobacter concisus 13826	E-value = 3.00E-19	Identity = 38.24%
	4	gi 154175540 ref YP_001408813.1	Campylobacter curvus 525.92	E-value = 4.00E-19	Identity = 33.93%
	5	gi 57504653 ref ZP_00370731.1	Campylobacter coli RM2228	E-value = 2.00E-18	Identity = 39.41%
AB1610	1	<i>atpF'</i> gi 34556933 ref NP_906748.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-18	Identity = 43.88%
	2	gi 78777605 ref YP_393920.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-16	Identity = 40.71%
	3	gi 152990969 ref YP_001356691.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-15	Identity = 38.57%
	4	gi 32265923 ref NP_859955.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-13	Identity = 35.97%
	5	gi 157165108 ref YP_001466340.1	Campylobacter concisus 13826	E-value = 3.00E-12	Identity = 37.86%
AB1611	1	<i>parB</i> gi 34556932 ref NP_906747.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-60	Identity = 50.18%
	2	gi 32265922 ref NP_859954.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-59	Identity = 56.90%
	3	gi 152993360 ref YP_001359081.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-58	Identity = 52.05%
	4	gi 152990970 ref YP_001356692.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-53	Identity = 49.45%
	5	gi 57240722 ref ZP_00368670.1	Campylobacter lari RM2100	E-value = 2.00E-53	Identity = 46.98%
AB1612	1	<i>parA</i> gi 78777607 ref YP_393922.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-100	Identity = 73.26%
	2	gi 152990971 ref YP_001356693.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-99	Identity = 72.76%
	3	gi 34556931 ref NP_906746.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-98	Identity = 70.93%
	4	gi 118474892 ref YP_892666.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-92	Identity = 66.15%
	5	gi 157164247 ref YP_001466338.1	Campylobacter concisus 13826	E-value = 2.00E-91	Identity = 68.99%
AB1613	1	<i>birA</i> gi 152990972 ref YP_001356694.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-53	Identity = 49.29%
	2	gi 154174735 ref YP_001408817.1	Campylobacter curvus 525.92	E-value = 2.00E-51	Identity = 52.43%
	3	gi 78777608 ref YP_393923.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-51	Identity = 50.71%
	4	gi 157164230 ref YP_001466337.1	Campylobacter concisus 13826	E-value = 3.00E-47	Identity = 45.02%
	5	gi 118474785 ref YP_892667.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-46	Identity = 45.50%
AB1614	1		*** No matches found ***		
AB1615	1	gi 56461212 ref YP_156493.1	Idiomarina loihiensis L2TR	E-value = 7.00E-28	Identity = 31.49%

	2	gi 85711171 ref ZP_01042231.1	Idiomarina baltica OS145	E-value = 2.00E-27	Identity = 32.78%
	3	gi 68551939 ref ZP_00591332.1	Prosthecochloris aestuarii DSM 271	E-value = 7.00E-27	Identity = 28.93%
	4	gi 15606582 ref NP_213962.1	Aquifex aeolicus VF5	E-value = 1.00E-26	Identity = 29.96%
	5	gi 34557125 ref NP_906940.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-26	Identity = 29.90%
AB1616	1 <i>fmt</i>	gi 152990973 ref YP_001356695.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-93	Identity = 55.67%
	2	gi 34556929 ref NP_906744.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-83	Identity = 51.82%
	3	gi 78777609 ref YP_393924.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-82	Identity = 52.63%
	4	gi 57240719 ref ZP_00368667.1	Campylobacter lari RM2100	E-value = 5.00E-79	Identity = 52.81%
	5	gi 149194001 ref ZP_01871099.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-78	Identity = 48.49%
AB1617	1 <i>proB</i>	gi 152990975 ref YP_001356697.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-75	Identity = 60.64%
	2	gi 34556928 ref NP_906743.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-73	Identity = 56.42%
	3	gi 154339603 ref XP_001562493.1	Leishmania braziliensis	E-value = 7.00E-68	Identity = 53.36%
	4	gi 154339609 ref XP_001562496.1	Leishmania braziliensis	E-value = 7.00E-68	Identity = 53.36%
	5	gi 68127346 emb CAJ05678.1	Leishmania major	E-value = 3.00E-66	Identity = 52.57%
AB1618	1 <i>obg</i>	gi 152990976 ref YP_001356698.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-118	Identity = 62.53%
	2	gi 118474188 ref YP_892670.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-110	Identity = 63.23%
	3	gi 34556927 ref NP_906742.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-109	Identity = 60.78%
	4	gi 78777611 ref YP_393926.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-106	Identity = 56.16%
	5	gi 154174924 ref YP_001408821.1	Campylobacter curvus 525.92	E-value = 6.00E-102	Identity = 60.93%
AB1619	1 <i>rpmA</i>	gi 34556926 ref NP_906741.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-27	Identity = 84.71%
	2	gi 149194856 ref ZP_01871950.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-26	Identity = 87.80%
	3	gi 154173918 ref YP_001408822.1	Campylobacter curvus 525.92	E-value = 3.00E-26	Identity = 83.53%
	4	gi 57240717 ref ZP_00368665.1	Campylobacter lari RM2100	E-value = 3.00E-26	Identity = 85.71%
	5	gi 15791483 ref NP_281306.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-26	Identity = 84.52%
AB1620	1 <i>rplU</i>	gi 118474453 ref YP_892672.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-20	Identity = 60.00%
	2	gi 154148578 ref YP_001406889.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-19	Identity = 58.10%
	3	gi 152993367 ref YP_001359088.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-19	Identity = 60.00%
	4	gi 78777613 ref YP_393928.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-19	Identity = 61.90%
	5	gi 157165737 ref YP_001466320.1	Campylobacter concisus 13826	E-value = 6.00E-19	Identity = 57.69%
AB1621	1 <i>dnaG</i>	gi 152989961 ref YP_001355683.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-161	Identity = 53.14%
	2	gi 78776224 ref YP_392539.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-157	Identity = 52.18%
	3	gi 152993832 ref YP_001359553.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-152	Identity = 53.02%
	4	gi 34558196 ref NP_908011.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-150	Identity = 48.91%
	5	gi 32266698 ref NP_860730.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-144	Identity = 51.17%
AB1622	1	gi 78778220 ref YP_394535.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-43	Identity = 37.39%
	2	gi 34558195 ref NP_908010.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-40	Identity = 35.51%
	3	gi 32266196 ref NP_860228.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-37	Identity = 30.14%
	4	gi 157165736 ref YP_001466238.1	Campylobacter concisus 13826	E-value = 3.00E-36	Identity = 29.71%
	5	gi 154174836 ref YP_001409226.1	Campylobacter curvus 525.92	E-value = 9.00E-36	Identity = 29.71%
AB1623	1 <i>mc</i>	gi 34558193 ref NP_908008.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-71	Identity = 64.84%
	2	gi 152993835 ref YP_001359556.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-71	Identity = 67.26%
	3	gi 78778218 ref YP_394533.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-71	Identity = 67.13%
	4	gi 57241757 ref ZP_00369702.1	Campylobacter lari RM2100	E-value = 2.00E-63	Identity = 61.11%
	5	gi 57238646 ref YP_179777.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-63	Identity = 57.92%
AB1624	1 <i>aroC</i>	gi 152993836 ref YP_001359557.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-135	Identity = 67.13%
	2	gi 78778217 ref YP_394532.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-133	Identity = 66.48%
	3	gi 152989965 ref YP_001355687.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-131	Identity = 66.85%
	4	gi 149194958 ref ZP_01872051.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-129	Identity = 66.11%
	5	gi 32266199 ref NP_860231.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-125	Identity = 62.01%

AB1625	1	gi 148253338 ref YP_001237923.1	Bradyrhizobium sp. BTAi1	E-value = 2.00E-54	Identity = 43.29%
	2	gi 34557984 ref NP_907799.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-53	Identity = 43.81%
	3	gi 13472673 ref NP_104240.1	Mesorhizobium loti MAFF303099	E-value = 8.00E-52	Identity = 43.50%
	4	gi 146300635 ref YP_001195226.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-51	Identity = 47.22%
	5	gi 32265720 ref NP_859752.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-43	Identity = 40.32%
AB1626	1	gi 157165575 ref YP_001466520.1	Campylobacter concisus 13826	E-value = 2.00E-88	Identity = 56.79%
	2	gi 152992029 ref YP_001357750.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-86	Identity = 61.29%
	3	gi 154175155 ref YP_001408666.1	Campylobacter curvus 525.92	E-value = 6.00E-82	Identity = 57.19%
	4	gi 154148635 ref YP_001406000.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-80	Identity = 59.01%
	5	gi 118474137 ref YP_892712.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-73	Identity = 54.68%
AB1627	1	gi 146300223 ref YP_001194814.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-41	Identity = 42.17%
	2	gi 110637732 ref YP_677939.1	Cytophaga hutchinsonii ATCC 33406	E-value = 6.00E-41	Identity = 37.33%
	3	gi 149184720 ref ZP_01863038.1	Erythrobacter sp. SD-21	E-value = 3.00E-24	Identity = 29.14%
	4	gi 85708853 ref ZP_01039919.1	Erythrobacter sp. NAP1	E-value = 4.00E-24	Identity = 31.49%
	5	gi 124005388 ref ZP_01690229.1	Microscilla marina ATCC 23134	E-value = 1.00E-22	Identity = 32.96%
AB1628	1	gi 67158560 ref ZP_00419466.1	Azotobacter vinelandii AvOP	E-value = 1.00E-19	Identity = 35.22%
	2	gi 152993478 ref YP_001359199.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-17	Identity = 33.33%
	3	gi 67918015 ref ZP_00511617.1	Chlorobium limicola DSM 245	E-value = 2.00E-16	Identity = 35.63%
	4	gi 57237827 ref YP_179075.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-16	Identity = 33.54%
	5	gi 15792329 ref NP_282152.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-16	Identity = 33.54%
AB1629	1	<b>*** No matches found ***</b>			
AB1630	1	<i>trmE</i> gi 152990630 ref YP_001356352.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-139	Identity = 61.52%
	2	gi 78776726 ref YP_393041.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-137	Identity = 60.95%
	3	gi 152993155 ref YP_001358876.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-134	Identity = 58.78%
	4	gi 149193806 ref ZP_01870904.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-128	Identity = 59.01%
	5	gi 34557648 ref NP_907463.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-114	Identity = 49.31%
AB1631	1	gi 152990629 ref YP_001356351.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-56	Identity = 49.47%
	2	gi 34557649 ref NP_907464.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-53	Identity = 43.04%
	3	gi 118475440 ref YP_891744.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-50	Identity = 41.72%
	4	gi 152993156 ref YP_001358877.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-47	Identity = 41.98%
	5	gi 57167878 ref ZP_00367018.1	Campylobacter coli RM2228	E-value = 3.00E-45	Identity = 39.60%
AB1632	1	<i>oxaA</i> gi 118474690 ref YP_891743.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-155	Identity = 53.26%
	2	gi 152990628 ref YP_001356350.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-150	Identity = 51.82%
	3	gi 157164729 ref YP_001466647.1	Campylobacter concisus 13826	E-value = 4.00E-150	Identity = 50.00%
	4	gi 154174780 ref YP_001408435.1	Campylobacter curvus 525.92	E-value = 7.00E-147	Identity = 49.52%
	5	gi 34557650 ref NP_907465.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-142	Identity = 48.39%
AB1633	1	gi 152990627 ref YP_001356349.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-20	Identity = 50.53%
	2	gi 154148175 ref YP_001406233.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-18	Identity = 43.64%
	3	gi 154175264 ref YP_001408436.1	Campylobacter curvus 525.92	E-value = 4.00E-17	Identity = 46.88%
	4	gi 78776723 ref YP_393038.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-15	Identity = 46.53%
	5	gi 157165305 ref YP_001466646.1	Campylobacter concisus 13826	E-value = 6.00E-15	Identity = 50.00%
AB1634	1	<i>rpmH</i> gi 32265615 ref NP_859647.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-05	Identity = 93.18%
	2	gi 15792290 ref NP_282113.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-05	Identity = 93.18%
	3	gi 57167874 ref ZP_00367014.1	Campylobacter coli	E-value = 5.00E-05	Identity = 93.18%
	4	gi 57237789 ref YP_179037.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 5.00E-05	Identity = 93.18%
	5	gi 86150683 ref ZP_01068904.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 5.00E-05	Identity = 93.18%
AB1635	1	<i>clpB</i> gi 152993046 ref YP_001358767.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 74.18%
	2	gi 152990623 ref YP_001356345.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 73.28%
	3	gi 34557025 ref NP_906840.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 70.21%



	4	gi 78776720 ref YP_393035.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 69.43%
	5	gi 118475028 ref YP_892113.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 68.42%
AB1636	1	mhB gi 78776481 ref YP_392796.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-49	Identity = 58.99%
	2	gi 152993838 ref YP_001359559.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-45	Identity = 53.59%
	3	gi 34558029 ref NP_907844.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-44	Identity = 53.11%
	4	gi 149194772 ref ZP_01871867.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-44	Identity = 57.45%
	5	gi 152989967 ref YP_001355689.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-44	Identity = 52.54%
AB1637	1	gi 152990832 ref YP_001356554.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-23	Identity = 59.18%
	2	gi 149194534 ref ZP_01871630.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-17	Identity = 49.51%
	3	gi 152993930 ref YP_001359651.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-13	Identity = 42.42%
	4	gi 124516764 gb EAY58272.1	Leptospirillum sp. Group II UBA	E-value = 1.00E-12	Identity = 41.58%
	5	gi 117925472 ref YP_866089.1	Magnetococcus sp. MC-1	E-value = 1.00E-10	Identity = 39.00%
AB1638	1	gi 149193695 ref ZP_01870793.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-89	Identity = 66.40%
	2	gi 152993180 ref YP_001358901.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-88	Identity = 57.75%
	3	gi 117926643 ref YP_867260.1	Magnetococcus sp. MC-1	E-value = 2.00E-82	Identity = 56.98%
	4	gi 152992285 ref YP_001358006.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-69	Identity = 52.65%
	5	gi 78778078 ref YP_394393.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-66	Identity = 51.41%
AB1639	1	gi 152992779 ref YP_001358500.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-21	Identity = 48.18%
	2	gi 78776744 ref YP_393059.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-16	Identity = 46.23%
	3	gi 152990187 ref YP_001355909.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-14	Identity = 44.44%
	4	gi 118474533 ref YP_892509.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-11	Identity = 37.14%
	5	gi 154148829 ref YP_001406087.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-10	Identity = 37.61%
AB1640	1	msrA gi 145622518 ref ZP_01778476.1	Petrogona mobilis SJ95	E-value = 1.00E-48	Identity = 62.42%
	2	gi 94986564 ref YP_594497.1	Lawsonia intracellularis PHE/MN1-00	E-value = 3.00E-39	Identity = 55.56%
	3	gi 123430810 ref XP_001307970.1	Trichomonas vaginalis G3	E-value = 4.00E-39	Identity = 50.63%
	4	gi 149194462 ref ZP_01871559.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-37	Identity = 48.70%
	5	gi 123396703 ref XP_001300955.1	Trichomonas vaginalis G3	E-value = 1.00E-36	Identity = 52.20%
AB1641	1	msrB gi 88857491 ref ZP_01132134.1	Pseudoalteromonas tunicata D2	E-value = 4.00E-43	Identity = 68.10%
	2	gi 153951037 ref YP_001397776.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-41	Identity = 73.68%
	3	gi 15792437 ref NP_282260.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-41	Identity = 73.68%
	4	gi 57237994 ref YP_179243.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-41	Identity = 72.81%
	5	gi 90416627 ref ZP_01224558.1	marine gamma proteobacterium HTCC2207	E-value = 4.00E-41	Identity = 67.54%
AB1642	1	gi 90406948 ref ZP_01215139.1	Psychromonas sp. CNPT3	E-value = 2.00E-58	Identity = 58.13%
	2	gi 119945138 ref YP_942818.1	Psychromonas ingrahamii 37	E-value = 3.00E-58	Identity = 56.86%
	3	gi 90413984 ref ZP_01221968.1	Photobacterium profundum 3TCK	E-value = 1.00E-56	Identity = 50.75%
	4	gi 127512464 ref YP_001093661.1	Shewanella loihica PV-4	E-value = 2.00E-56	Identity = 52.58%
	5	gi 157375004 ref YP_001473604.1	Shewanella sediminis HAW-EB3	E-value = 1.00E-54	Identity = 52.45%
AB1643	1	gi 78358249 ref YP_389698.1	Desulfovibrio desulfuricans G20	E-value = 5.00E-11	Identity = 28.43%
	2	gi 29346832 ref NP_810335.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 2.00E-07	Identity = 28.16%
	3	gi 88192935 pdb 2FB6 A	Bacteroides thetaiotaomicron VPI-5482	E-value = 7.00E-07	Identity = 28.16%
	4	gi 150021579 ref YP_001306933.1	Thermosiphon melanesiensis BI429	E-value = 6.00E-06	Identity = 26.85%
AB1644	1	gi 134299425 ref YP_001112921.1	Desulfotomaculum reducens MI-1	E-value = 2.00E-44	Identity = 43.81%
	2	gi 34763836 ref ZP_00144745.1	Fusobacterium nucleatum subsp. vincentii ATCC 49256	E-value = 6.00E-28	Identity = 39.50%
	3	gi 149180516 ref ZP_01859020.1	Bacillus sp. SG-1	E-value = 7.00E-25	Identity = 35.29%
	4	gi 147678158 ref YP_001212373.1	Pelotomaculum thermopropionicum SI	E-value = 1.00E-24	Identity = 36.27%
	5	gi 114566563 ref YP_753717.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 1.00E-24	Identity = 32.56%
AB1645	1	bioA gi 110833117 ref YP_691976.1	Alcanivorax borkumensis SK2	E-value = 8.00E-132	Identity = 54.96%
	2	gi 6137239 gb AAF04396.1 AF191556_4	Xenorhabdus nematophila	E-value = 9.00E-130	Identity = 52.52%
	3	gi 67940204 ref ZP_00532661.1	Chlorobium phaeobacteroides BS1	E-value = 1.00E-129	Identity = 54.39%

	4	gi 77960830 ref ZP_00824685.1	Yersinia mollaretii ATCC 43969	E-value = 1.00E-129	Identity = 52.63%
	5	gi 37525435 ref NP_928779.1	Photorhabdus luminescens subsp. laumondii TTO1	E-value = 2.00E-129	Identity = 52.28%
AB1646	1	gi 119946331 ref YP_944011.1	Psychromonas ingrahamii 37	E-value = 9.00E-148	Identity = 43.02%
	2	gi 78776237 ref YP_392552.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-138	Identity = 35.42%
	3	gi 95931350 ref ZP_01314063.1	Desulfuromonas acetoxidans DSM 684	E-value = 3.00E-77	Identity = 30.24%
AB1647	1	gi 78776749 ref YP_393064.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 77.60%
	2	gi 152993150 ref YP_001358871.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 73.33%
	3	gi 154174806 ref YP_001408428.1	Campylobacter curvus 525.92	E-value = 0	Identity = 68.24%
	4	gi 157165620 ref YP_001466655.1	Campylobacter concisus 13826	E-value = 0	Identity = 69.02%
	5	gi 34558180 ref NP_907995.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 66.08%
AB1648	1	gi 78776746 ref YP_393061.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 71.78%
	2	gi 152990642 ref YP_001356364.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 70.45%
	3	gi 152993151 ref YP_001358872.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 69.78%
	4	gi 34557223 ref NP_907038.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 66.94%
	5	gi 149194633 ref ZP_01871729.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 67.77%
AB1649	1	gi 34557654 ref NP_907469.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-64	Identity = 40.44%
	2	gi 147667732 gb ABQ45832.1	Helicobacter pylori	E-value = 5.00E-60	Identity = 38.41%
	3	gi 109947439 ref YP_664667.1	Helicobacter acinonychis str. Sheeba	E-value = 8.00E-60	Identity = 38.11%
	4	gi 147667728 gb ABQ45830.1	Helicobacter pylori	E-value = 1.00E-59	Identity = 37.80%
	5	gi 15611534 ref NP_223185.1	Helicobacter pylori J99	E-value = 1.00E-59	Identity = 37.50%
AB1650	1	gi 118475048 ref YP_891871.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-94	Identity = 48.94%
	2	gi 157164560 ref YP_001466774.1	Campylobacter concisus 13826	E-value = 2.00E-89	Identity = 44.57%
	3	gi 34556703 ref NP_906518.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-88	Identity = 47.51%
	4	gi 57240635 ref ZP_00368584.1	Campylobacter lari RM2100	E-value = 8.00E-87	Identity = 46.05%
	5	gi 154149492 ref YP_001407150.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-84	Identity = 44.66%
AB1651	1	gi 152991606 ref YP_001357327.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-71	Identity = 68.48%
	2	gi 152989913 ref YP_001355635.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-71	Identity = 67.93%
	3	gi 157164234 ref YP_001465994.1	Campylobacter concisus 13826	E-value = 2.00E-68	Identity = 67.78%
	4	gi 154174139 ref YP_001407434.1	Campylobacter curvus 525.92	E-value = 3.00E-68	Identity = 67.78%
	5	gi 78778280 ref YP_394595.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-67	Identity = 68.79%
AB1652	1	gi 78221361 ref YP_383108.1	Geobacter metallireducens GS-15	E-value = 3.00E-78	Identity = 48.75%
	2	gi 39998411 ref NP_954362.1	Geobacter sulfurreducens PCA	E-value = 8.00E-76	Identity = 47.81%
	3	gi 118743828 ref ZP_01591829.1	Geobacter lovleyi SZ	E-value = 6.00E-73	Identity = 48.46%
	4	gi 34557417 ref NP_907232.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-68	Identity = 43.03%
	5	gi 32267178 ref NP_861210.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-63	Identity = 39.75%
AB1653	1	gi 152990756 ref YP_001356478.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-38	Identity = 31.04%
	2	gi 118475095 ref YP_892177.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-36	Identity = 28.68%
	3	gi 152991304 ref YP_001357026.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-35	Identity = 27.45%
	4	gi 154174517 ref YP_001408338.1	Campylobacter curvus 525.92	E-value = 1.00E-34	Identity = 26.09%
	5	gi 157164422 ref YP_001466823.1	Campylobacter concisus 13826	E-value = 1.00E-33	Identity = 25.49%
AB1654	1	gi 17388924 gb AAL38651.1	Burkholderia cenocepacia	E-value = 7.00E-71	Identity = 40.47%
	2	gi 84356363 ref ZP_00981211.1	Burkholderia cenocepacia PC184	E-value = 2.00E-70	Identity = 40.18%
	3	gi 153839991 ref ZP_01992658.1	Vibrio parahaemolyticus AQ3810	E-value = 2.00E-70	Identity = 39.27%
	4	gi 1657238 emb CAA70319.1	Acinetobacter sp. ADP1	E-value = 1.00E-67	Identity = 39.08%
	5	gi 94267867 ref ZP_01291018.1	delta proteobacterium MLMS-1	E-value = 1.00E-67	Identity = 37.82%
AB1655	1	gi 134288517 ref YP_001110680.1	Burkholderia vietnamiensis G4	E-value = 3.00E-10	Identity = 32.37%
AB1656	1	gi 152990029 ref YP_001355751.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-40	Identity = 41.78%
	2	gi 152991709 ref YP_001357430.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-36	Identity = 40.09%
	3	gi 34556743 ref NP_906558.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-36	Identity = 41.31%

	4	gi 149195301 ref ZP_01872389.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-32	Identity = 42.03%
	5	gi 57237226 ref YP_178238.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 6.00E-30	Identity = 43.75%
AB1657	1	gi 115359529 ref YP_776667.1	Burkholderia cepacia AMMD	E-value = 6.00E-33	Identity = 39.64%
	2	gi 91783393 ref YP_558599.1	Burkholderia xenovorans LB400	E-value = 5.00E-32	Identity = 39.64%
	3	gi 118746918 ref ZP_01594822.1	Geobacter lovleyi SZ	E-value = 4.00E-20	Identity = 32.71%
	4	gi 119509502 ref ZP_01628650.1	Nodularia spumigena CCY9414	E-value = 6.00E-20	Identity = 33.33%
	5	gi 148262486 ref YP_001229192.1	Geobacter uraniumreducens Rf4	E-value = 2.00E-17	Identity = 30.99%
AB1658	1	gi 118072798 ref ZP_01540985.1	Shewanella woodyi ATCC 51908	E-value = 5.00E-63	Identity = 62.57%
AB1659	1	gi 86149184 ref ZP_01067416.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 2.00E-74	Identity = 58.91%
	2	gi 156147244 gb ABU53822.1	Campylobacter phage CGC-2007	E-value = 5.00E-74	Identity = 58.91%
	3	gi 156147278 gb ABU53854.1	Campylobacter phage CGC-2007	E-value = 6.00E-74	Identity = 58.91%
	4	gi 156147207 gb ABU53787.1	Campylobacter phage CGC-2007	E-value = 9.00E-74	Identity = 58.91%
	5	gi 156147139 gb ABU53723.1	Campylobacter phage CGC-2007	E-value = 2.00E-73	Identity = 58.53%
AB1660	1	gi 86151696 ref ZP_01069910.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-36	Identity = 33.23%
	2	gi 57237264 ref YP_178277.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-35	Identity = 32.62%
	3	gi 86149765 ref ZP_01067994.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 1.00E-35	Identity = 32.62%
	4	gi 83586159 ref ZP_00924796.1	Escherichia coli 101-1	E-value = 5.00E-22	Identity = 26.67%
	5	gi 16761548 ref NP_457165.1	Salmonella enterica subsp. enterica serovar Typhi str. CT18	E-value = 9.00E-22	Identity = 26.67%
AB1661	1		*** No matches found ***		
AB1662	1		*** No matches found ***		
AB1663	1	gi 42520427 ref NP_966342.1	Wolbachia endosymbiont of Drosophila melanogaster	E-value = 1.00E-90	Identity = 40.19%
	2	gi 99034521 ref ZP_01314502.1	Wolbachia endosymbiont of Drosophila willistoni TSC#14030-0811.24	E-value = 4.00E-90	Identity = 40.34%
	3	gi 16517105 gb AAL24514.1	Wolbachia endosymbiont of Drosophila melanogaster	E-value = 2.00E-89	Identity = 39.62%
	4	gi 58698944 ref ZP_00373803.1	Wolbachia endosymbiont of Drosophila ananassae	E-value = 1.00E-88	Identity = 38.68%
	5	gi 71901663 ref ZP_00683740.1	Xylella fastidiosa Ann-1	E-value = 1.00E-50	Identity = 26.48%
AB1664	1		*** No matches found ***		
AB1665	1	gi 86151682 ref ZP_01069896.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-11	Identity = 31.90%
	2	gi 156147197 gb ABU53778.1	Campylobacter phage CGC-2007	E-value = 2.00E-11	Identity = 32.30%
	3	gi 57237237 ref YP_178249.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-11	Identity = 31.45%
AB1666	1	gi 28870560 ref NP_793179.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 2.00E-13	Identity = 26.51%
	2	gi 46133068 ref ZP_00156540.2	Haemophilus influenzae R2866	E-value = 4.00E-06	Identity = 26.13%
AB1667	1		*** No matches found ***		
AB1668	1	gi 77975670 ref ZP_00831204.1	Yersinia frederiksenii ATCC 33641	E-value = 7.00E-10	Identity = 32.26%
	2	gi 75240415 ref ZP_00724349.1	Escherichia coli F11	E-value = 4.00E-07	Identity = 28.48%
	3	gi 15799958 ref NP_285970.1	Escherichia coli O157:H7 EDL933	E-value = 6.00E-07	Identity = 27.85%
	4	gi 83586328 ref ZP_00924963.1	Escherichia coli 101-1	E-value = 1.00E-06	Identity = 27.85%
	5	gi 16129119 ref NP_415674.1	Escherichia coli K12	E-value = 1.00E-06	Identity = 26.75%
AB1669	1	gi 146313120 ref YP_001178194.1	Enterobacter sp. 638	E-value = 4.00E-21	Identity = 28.19%
	2	gi 156147202 gb ABU53783.1	Campylobacter phage CGC-2007	E-value = 2.00E-19	Identity = 27.62%
	3	gi 156147236 gb ABU53815.1	Campylobacter phage CGC-2007	E-value = 3.00E-19	Identity = 26.92%
	4	gi 156147133 gb ABU53718.1	Campylobacter phage CGC-2007	E-value = 7.00E-19	Identity = 26.92%
	5	gi 78358433 ref YP_389882.1	Desulfovibrio desulfuricans G20	E-value = 3.00E-11	Identity = 26.79%
AB1670	1	gi 86149092 ref ZP_01067324.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 2.00E-17	Identity = 35.54%
	2	gi 57237243 ref YP_178255.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-17	Identity = 35.54%
	3	gi 86151762 ref ZP_01069976.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 9.00E-17	Identity = 34.94%
	4	gi 75228033 ref ZP_00714713.1	Escherichia coli B7A	E-value = 4.00E-12	Identity = 28.11%
	5	gi 28870563 ref NP_793182.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 8.00E-12	Identity = 29.26%
AB1671	1	gi 8670758 emb CAB94939.1	Campylobacter coli	E-value = 1.00E-24	Identity = 30.77%
	2	gi 57237244 ref YP_178256.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-24	Identity = 31.09%

	3	gi 86151542 ref ZP_01069756.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 9.00E-24	Identity = 30.45%
	4	gi 86148960 ref ZP_01067192.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 1.00E-23	Identity = 30.13%
	5	gi 145633950 ref ZP_01789669.1	Haemophilus influenzae 3655	E-value = 4.00E-12	Identity = 26.99%
AB1672	1		<b>*** No matches found ***</b>		
AB1673	1	gi 86151824 ref ZP_01070038.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-22	Identity = 40.21%
	2	gi 57237247 ref YP_178259.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 5.00E-22	Identity = 40.21%
	3	gi 86149197 ref ZP_01067429.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 7.00E-22	Identity = 39.44%
	4	gi 72537705 ref YP_293735.1	Burkholderia phage phi52237	E-value = 3.00E-12	Identity = 26.98%
	5	gi 53722105 ref YP_111090.1	Burkholderia pseudomallei K96243	E-value = 3.00E-12	Identity = 28.11%
AB1674	1		<b>*** No matches found ***</b>		
AB1675	1	gi 154149417 ref YP_001405877.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-08	Identity = 45.16%
AB1676	1	gi 154148430 ref YP_001405876.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-07	Identity = 36.27%
AB1677	1		<b>*** No matches found ***</b>		
AB1678	1	gi 57237254 ref YP_178267.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-29	Identity = 35.86%
	2	gi 86151555 ref ZP_01069769.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 5.00E-29	Identity = 35.46%
	3	gi 153092842 gb EDN73879.1	Mannheimia haemolytica PHL213	E-value = 8.00E-10	Identity = 30.14%
	4	gi 33151720 ref NP_873073.1	Haemophilus ducreyi 3500HP	E-value = 4.00E-08	Identity = 25.54%
AB1679	1		<b>*** No matches found ***</b>		
AB1680	1	gi 86148938 ref ZP_01067170.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 4.00E-30	Identity = 31.45%
	2	gi 57237256 ref YP_178269.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 5.00E-30	Identity = 31.23%
	3	gi 86151743 ref ZP_01069957.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 6.00E-30	Identity = 31.45%
	4	gi 53802937 ref YP_115315.1	Methylococcus capsulatus str. Bath	E-value = 1.00E-07	Identity = 26.59%
AB1681	1	gi 57237257 ref YP_178270.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 7.00E-16	Identity = 46.23%
AB1682	1		<b>*** No matches found ***</b>		
AB1683	1	gi 86149227 ref ZP_01067459.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 2.00E-122	Identity = 44.04%
	2	gi 86151825 ref ZP_01070039.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 6.00E-122	Identity = 43.67%
	3	gi 57237259 ref YP_178272.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-121	Identity = 44.66%
	4	gi 46581109 ref YP_011917.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 1.00E-82	Identity = 36.19%
	5	gi 38229138 ref NP_938233.1	Pseudomonas phage D3112	E-value = 2.00E-77	Identity = 37.00%
AB1684	1	gi 57237260 ref YP_178273.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-61	Identity = 34.95%
	2	gi 86149035 ref ZP_01067267.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 4.00E-61	Identity = 34.95%
	3	gi 145635818 ref ZP_01791510.1	Haemophilus influenzae PittAA	E-value = 1.00E-25	Identity = 26.21%
	4	gi 54654574 gb AAV37152.1	Haemophilus influenzae biotype aegyptius	E-value = 9.00E-25	Identity = 25.46%
	5	gi 145637185 ref ZP_01792847.1	Haemophilus influenzae PittHH	E-value = 2.00E-24	Identity = 25.35%
AB1685	1	gi 134295415 ref YP_001119150.1	Burkholderia vietnamiensis G4	E-value = 2.00E-32	Identity = 29.17%
	2	gi 114778722 ref ZP_01453532.1	Mariiprofundus ferrooxydans PV-1	E-value = 1.00E-27	Identity = 26.53%
AB1686	1	gi 53802934 ref YP_115318.1	Methylococcus capsulatus str. Bath	E-value = 6.00E-11	Identity = 29.33%
	2	gi 85058816 ref YP_454518.1	Sodalis glossinidius str. 'morsitans'	E-value = 3.00E-08	Identity = 29.41%
	3	gi 86149132 ref ZP_01067364.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 5.00E-08	Identity = 29.34%
	4	gi 156147226 gb ABU53805.1	Campylobacter phage CGC-2007	E-value = 6.00E-08	Identity = 29.34%
	5	gi 15794245 ref NP_284067.1	Neisseria meningitidis Z2491	E-value = 7.00E-08	Identity = 32.64%
AB1687	1	gi 57237265 ref YP_178278.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-08	Identity = 41.05%
AB1688	1		<b>*** No matches found ***</b>		
AB1690	1	gi 51245417 ref YP_065301.1	Desulfotalea psychrophila LSV54	E-value = 3.00E-22	Identity = 28.44%
	2	gi 153215749 ref ZP_01950118.1	Vibrio cholerae 1587	E-value = 1.00E-19	Identity = 30.95%
AB1692	1	gi 86149931 ref ZP_01068160.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 8.00E-38	Identity = 34.51%
	2	gi 57237271 ref YP_178284.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-37	Identity = 34.51%
	3	gi 86151593 ref ZP_01069807.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-37	Identity = 34.51%
AB1693	1		<b>*** No matches found ***</b>		

AB1694	1		<b>*** No matches found ***</b>		
AB1696	1	gi 154174211 ref YP_001409071.1	Campylobacter curvus 525.92	E-value = 2.00E-37	Identity = 49.73%
	2	gi 152990232 ref YP_001355954.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-34	Identity = 42.08%
	3	gi 154148627 ref YP_001405879.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-28	Identity = 44.51%
	4	gi 154148945 ref YP_001407114.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-27	Identity = 44.19%
	5	gi 118732540 ref ZP_01581054.1	Delftia acidovorans SPH-1	E-value = 8.00E-20	Identity = 36.84%
AB1697	1	gi 114707500 ref ZP_01440396.1	Fulvimarina pelagi HTCC2506	E-value = 7.00E-27	Identity = 36.63%
	2	gi 118593663 ref ZP_01551039.1	Stappia aggregata IAM 12614	E-value = 4.00E-24	Identity = 34.16%
	3	gi 85058798 ref YP_454500.1	Sodalis glossinidius str. 'morsitans'	E-value = 6.00E-24	Identity = 32.37%
	4	gi 77957251 ref ZP_00821311.1	Yersinia bercovieri ATCC 43970	E-value = 2.00E-23	Identity = 34.33%
	5	gi 153000597 ref YP_001366278.1	Shewanella baltica OS185	E-value = 1.00E-22	Identity = 32.84%
AB1698	1		<b>*** No matches found ***</b>		
AB1700	1		<b>*** No matches found ***</b>		
AB1701	1		<b>*** No matches found ***</b>		
AB1702	1	gi 120599731 ref YP_964305.1	Shewanella sp. W3-18-1	E-value = 1.00E-24	Identity = 35.08%
	2	gi 46581093 ref YP_011901.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 6.00E-20	Identity = 27.03%
	3	gi 120612757 ref YP_972435.1	Acidovorax avenae subsp. citrulli AAC00-1	E-value = 2.00E-19	Identity = 28.70%
	4	gi 85858365 ref YP_460567.1	Syntrophus aciditrophicus SB	E-value = 2.00E-19	Identity = 28.83%
	5	gi 114778747 ref ZP_01453557.1	Mariprofundus ferrooxydans PV-1	E-value = 3.00E-19	Identity = 29.67%
AB1703	1		<b>*** No matches found ***</b>		
AB1704	1		<b>*** No matches found ***</b>		
AB1705	1	gi 154148443 ref YP_001405854.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-15	Identity = 33.33%
	2	gi 32266247 ref NP_860279.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-14	Identity = 28.15%
	3	gi 149195301 ref ZP_01872389.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-10	Identity = 33.33%
	4	gi 34556743 ref NP_906558.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-10	Identity = 30.64%
	5	gi 9635582 ref NP_061565.1	Pseudomonas phage D3	E-value = 2.00E-09	Identity = 27.11%
AB1706	1		<b>*** No matches found ***</b>		
AB1707	1		<b>*** No matches found ***</b>		
AB1708	1		<b>*** No matches found ***</b>		
AB1709	1	era gi 152990747 ref YP_001356469.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-99	Identity = 61.94%
	2	gi 152993265 ref YP_001358986.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-97	Identity = 62.41%
	3	gi 34557655 ref NP_907470.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-97	Identity = 59.11%
	4	gi 78777575 ref YP_393890.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-90	Identity = 60.55%
	5	gi 149194255 ref ZP_01871352.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-86	Identity = 57.53%
AB1710	1	gi 154149407 ref YP_001406183.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-07	Identity = 25.45%
AB1711	1	gi 78778227 ref YP_394542.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-146	Identity = 53.56%
	2	gi 152991611 ref YP_001357332.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-143	Identity = 53.31%
	3	gi 57241774 ref ZP_00369719.1	Campylobacter lari RM2100	E-value = 3.00E-139	Identity = 52.18%
	4	gi 154173654 ref YP_001407440.1	Campylobacter curvus 525.92	E-value = 6.00E-139	Identity = 52.77%
	5	gi 157164155 ref YP_001465988.1	Campylobacter concisus 13826	E-value = 4.00E-135	Identity = 52.36%
AB1712	1		<b>*** No matches found ***</b>		
AB1713	1	def gi 152989916 ref YP_001355638.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-52	Identity = 67.55%
	2	gi 152991610 ref YP_001357331.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-48	Identity = 59.88%
	3	gi 154175184 ref YP_001407439.1	Campylobacter curvus 525.92	E-value = 2.00E-45	Identity = 59.75%
	4	gi 154149172 ref YP_001405640.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-45	Identity = 57.65%
	5	gi 118475317 ref YP_892810.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-45	Identity = 58.97%
AB1714	1	clpP gi 34558484 ref NP_908299.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-87	Identity = 82.29%
	2	gi 152991609 ref YP_001357330.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-86	Identity = 81.25%
	3	gi 118474160 ref YP_892812.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-85	Identity = 83.16%

	4	gi 78778230 ref YP_394545.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-85	Identity = 80.21%
	5	gi 152989915 ref YP_001355637.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-84	Identity = 83.16%
AB1715	1	gi 152991608 ref YP_001357329.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-104	Identity = 54.57%
	2	gi 78778231 ref YP_394546.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-102	Identity = 51.04%
	3	gi 157165093 ref YP_001465992.1	Campylobacter concisus 13826	E-value = 6.00E-97	Identity = 49.18%
	4	gi 152989914 ref YP_001355636.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-90	Identity = 48.26%
	5	gi 154175478 ref YP_001407436.1	Campylobacter curvus 525.92	E-value = 5.00E-90	Identity = 46.73%
AB1716	1	gi 117926643 ref YP_867260.1	Magnetococcus sp. MC-1	E-value = 2.00E-82	Identity = 52.46%
	2	gi 51246595 ref YP_066479.1	Desulfotalea psychrophila LSv54	E-value = 7.00E-62	Identity = 47.46%
	3	gi 33600251 ref NP_887811.1	Bordetella bronchiseptica RB50	E-value = 7.00E-61	Identity = 40.13%
	4	gi 33595727 ref NP_883370.1	Bordetella parapertussis 12822	E-value = 6.00E-60	Identity = 39.80%
	5	gi 118729738 ref ZP_01578255.1	Delftia acidovorans SPH-1	E-value = 1.00E-56	Identity = 39.10%
AB1718	1	gi 78778078 ref YP_394393.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-91	Identity = 67.42%
	2	gi 152992285 ref YP_001358006.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-90	Identity = 63.37%
	3	gi 118474779 ref YP_892249.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-89	Identity = 66.42%
	4	gi 57238200 ref YP_178719.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 5.00E-88	Identity = 66.42%
	5	gi 86151711 ref ZP_01069925.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-87	Identity = 66.06%
AB1719	1	gi 78777378 ref YP_393693.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-140	Identity = 63.35%
	2	gi 152993160 ref YP_001358881.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-138	Identity = 59.52%
	3	gi 152991040 ref YP_001356762.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-133	Identity = 58.84%
	4	gi 149194966 ref ZP_01872059.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-128	Identity = 61.79%
	5	gi 34556614 ref NP_906429.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-127	Identity = 56.15%
AB1720	1	gi 57168656 ref ZP_00367788.1	Campylobacter coli RM2228	E-value = 0	Identity = 77.41%
	2	gi 121612631 ref YP_999896.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 0	Identity = 76.65%
	3	gi 157414486 ref YP_001481742.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 0	Identity = 76.65%
	4	gi 15791559 ref NP_281382.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 0	Identity = 76.65%
	5	gi 148926338 ref ZP_01810022.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 0	Identity = 76.40%
AB1721	1	gi 152991432 ref YP_001357154.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-77	Identity = 49.48%
	2	gi 152994022 ref YP_001359743.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-63	Identity = 42.86%
	3	gi 78776442 ref YP_392757.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-56	Identity = 38.13%
	4	gi 154175228 ref YP_001408727.1	Campylobacter curvus 525.92	E-value = 2.00E-46	Identity = 37.66%
	5	gi 152993870 ref YP_001359591.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-38	Identity = 34.76%
AB1722	1	gi 95929204 ref ZP_01311948.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-71	Identity = 52.85%
	2	gi 94499772 ref ZP_01306308.1	Oceanobacter sp. RED65	E-value = 2.00E-70	Identity = 55.02%
	3	gi 153885239 ref ZP_02006396.1	Ralstonia pickettii 12D	E-value = 2.00E-70	Identity = 54.03%
	4	gi 21233401 ref NP_639318.1	Xanthomonas campestris pv. campestris str. ATCC 33913	E-value = 8.00E-63	Identity = 45.20%
	5	gi 58580001 ref YP_199017.1	Xanthomonas oryzae pv. oryzae KACC10331	E-value = 1.00E-62	Identity = 44.94%
AB1723	1	gi 152991431 ref YP_001357153.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-15	Identity = 64.47%
AB1724	1		*** No matches found ***		
AB1725	1		*** No matches found ***		
AB1726	1		*** No matches found ***		
AB1727	1		*** No matches found ***		
AB1728	1	gi 110637901 ref YP_678108.1	Cytophaga hutchinsonii ATCC 33406	E-value = 3.00E-27	Identity = 27.30%
	2	gi 34541111 ref NP_905590.1	Porphyromonas gingivalis W83	E-value = 8.00E-22	Identity = 25.18%
	3	gi 147678832 ref YP_001213047.1	Pelotomaculum thermopropionicum SI	E-value = 7.00E-19	Identity = 25.37%
	4	gi 42525747 ref NP_970845.1	Treponema denticola ATCC 35405	E-value = 7.00E-17	Identity = 25.98%
AB1729	1	gi 151570667 gb EDN36321.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 6.00E-78	Identity = 37.25%
AB1730	1	gi 151570668 gb EDN36322.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 1.00E-48	Identity = 31.49%
	2	gi 56707658 ref YP_169554.1	Francisella tularensis subsp. tularensis SCHU S4	E-value = 6.00E-35	Identity = 28.06%

	3	gi 88856339 ref ZP_01130998.1	marine actinobacterium PHSC20C1	E-value = 1.00E-30	Identity = 28.98%
	4	gi 86153318 ref ZP_01071522.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-30	Identity = 32.70%
	5	gi 75674466 ref YP_316887.1	Nitrobacter winogradskyi Nb-255	E-value = 2.00E-29	Identity = 26.83%
AB1731	1	<i>hsdM</i> gi 151570669 gb EDN36323.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 0	Identity = 56.56%
	2	gi 156502396 ref YP_001428461.1	Francisella tularensis subsp. holarctica FTA	E-value = 0	Identity = 61.90%
	3	gi 157122252 gb EDO66392.1	Francisella tularensis subsp. holarctica FSC022	E-value = 0	Identity = 61.90%
	4	gi 89256323 ref YP_513685.1	Francisella tularensis subsp. holarctica	E-value = 0	Identity = 61.90%
	5	gi 57242478 ref ZP_00370416.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-52	Identity = 28.65%
AB1732	1	gi 71558959 ref YP_271693.1	Haemophilus influenzae biotype aegyptius	E-value = 2.00E-13	Identity = 37.04%
	2	gi 21628957 ref NP_660216.1	Haemophilus influenzae biotype aegyptius	E-value = 5.00E-13	Identity = 35.56%
	3	gi 29375136 ref NP_814289.1	Enterococcus faecalis V583	E-value = 1.00E-12	Identity = 32.08%
	4	gi 124008716 ref ZP_01693406.1	Microscilla marina ATCC 23134	E-value = 3.00E-12	Identity = 37.33%
	5	gi 75214512 ref ZP_00713084.1	Escherichia coli E110019	E-value = 1.00E-11	Identity = 34.75%
AB1733	1		*** No matches found ***		
AB1734	1		*** No matches found ***		
AB1735	1		*** No matches found ***		
AB1736	1		*** No matches found ***		
AB1737	1	<i>metC1</i> gi 110598546 ref ZP_01386815.1	Chlorobium ferrooxidans DSM 13031	E-value = 6.00E-72	Identity = 38.90%
	2	gi 68551294 ref ZP_00590711.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 3.00E-71	Identity = 38.80%
	3	gi 78187405 ref YP_375448.1	Pelodictyon luteolum DSM 273	E-value = 3.00E-69	Identity = 37.31%
	4	gi 126662648 ref ZP_01733647.1	Flavobacteria bacterium BAL38	E-value = 2.00E-68	Identity = 38.75%
	5	gi 150024459 ref YP_001295285.1	Flavobacterium psychrophilum JIP02/86	E-value = 5.00E-68	Identity = 40.44%
AB1738	1	<i>metC2</i> gi 45656012 ref YP_000098.1	Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	E-value = 9.00E-103	Identity = 43.56%
	2	gi 24212813 ref NP_710294.1	Leptospira interrogans serovar Lai str. 56601	E-value = 1.00E-102	Identity = 43.56%
	3	gi 116329878 ref YP_799596.1	Leptospira borgpetersenii serovar Hardjo-bovis JB197	E-value = 2.00E-98	Identity = 41.67%
	4	gi 116326890 ref YP_796610.1	Leptospira borgpetersenii serovar Hardjo-bovis L550	E-value = 2.00E-98	Identity = 41.67%
	5	gi 153890172 ref ZP_02011265.1	Opitutaceae bacterium TAV2	E-value = 1.00E-73	Identity = 31.20%
AB1739	1	gi 57242328 ref ZP_00370267.1	Campylobacter upsaliensis RM3195	E-value = 9.00E-33	Identity = 39.09%
	2	gi 86152679 ref ZP_01070884.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-32	Identity = 39.55%
	3	gi 15792551 ref NP_282374.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-32	Identity = 39.09%
	4	gi 57168123 ref ZP_00367262.1	Campylobacter coli RM2228	E-value = 4.00E-32	Identity = 38.64%
	5	gi 86150781 ref ZP_01068997.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-31	Identity = 38.64%
AB1740	1	gi 34557328 ref NP_907143.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-58	Identity = 32.54%
	2	gi 117619052 ref YP_855577.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 1.00E-52	Identity = 30.90%
	3	gi 144897509 emb CAM74373.1	Magnetospirillum gryphiswaldense MSR-1	E-value = 6.00E-47	Identity = 27.44%
	4	gi 30249816 ref NP_841886.1	Nitrosomonas europaea ATCC 19718	E-value = 5.00E-43	Identity = 27.93%
	5	gi 34557239 ref NP_907054.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-42	Identity = 30.98%
AB1741	1		*** No matches found ***		
AB1742	1	gi 76260085 ref ZP_00767726.1	Chloroflexus aurantiacus J-10-fl	E-value = 2.00E-49	Identity = 25.18%
AB1743	1	gi 86139783 ref ZP_01058349.1	Roseobacter sp. MED193	E-value = 5.00E-50	Identity = 27.16%
	2	gi 34557239 ref NP_907054.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-47	Identity = 32.09%
AB1744	1		*** No matches found ***		
AB1745	1	gi 84318419 ref ZP_00966843.1	Pseudomonas aeruginosa C3719	E-value = 1.00E-34	Identity = 33.58%
	2	gi 15595386 ref NP_248878.1	Pseudomonas aeruginosa PAO1	E-value = 6.00E-34	Identity = 33.21%
	3	gi 49083068 gb AAT50934.1	synthetic construct	E-value = 4.00E-33	Identity = 32.84%
	4	gi 76819292 ref YP_335259.1	Burkholderia pseudomallei 1710b	E-value = 4.00E-30	Identity = 30.11%
	5	gi 100235459 ref ZP_01336193.1	Burkholderia pseudomallei 406e	E-value = 5.00E-30	Identity = 30.32%
AB1746	1		*** No matches found ***		
AB1747	1		*** No matches found ***		

Accession	Query	Match	E-value	Identity
AB1748	1	<b>*** No matches found ***</b>		
AB1749	1	gi 118746165 ref ZP_01594117.1	Geobacter lovleyi SZ	E-value = 3.00E-49 Identity = 32.31%
	2	gi 77920163 ref YP_357978.1	Pelobacter carbinolicus DSM 2380	E-value = 4.00E-37 Identity = 29.78%
	3	gi 120601809 ref YP_966209.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 1.00E-36 Identity = 28.11%
	4	gi 46580888 ref YP_011696.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 1.00E-36 Identity = 28.11%
	5	gi 34557150 ref NP_906965.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-31 Identity = 26.38%
AB1750	1	gi 57240662 ref ZP_00368610.1	Campylobacter lari RM2100	E-value = 4.00E-14 Identity = 32.00%
	2	gi 57242734 ref ZP_00370671.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-13 Identity = 27.35%
	3	gi 34556531 ref NP_906346.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-13 Identity = 25.23%
	4	gi 154149275 ref YP_001407283.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-12 Identity = 27.27%
	5	gi 32267155 ref NP_861187.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-12 Identity = 29.33%
AB1751	1	gi 154174035 ref YP_001407840.1	Campylobacter curvus 525.92	E-value = 2.00E-31 Identity = 43.55%
	2	gi 42780539 ref NP_977786.1	Bacillus cereus ATCC 10987	E-value = 1.00E-29 Identity = 36.70%
	3	gi 30019499 ref NP_831130.1	Bacillus cereus ATCC 14579	E-value = 4.00E-29 Identity = 37.23%
	4	gi 52143988 ref YP_082837.1	Bacillus cereus E33L	E-value = 2.00E-28 Identity = 36.70%
	5	gi 152974874 ref YP_001374391.1	Bacillus cereus subsp. cytotoxis NVH 391-98	E-value = 2.00E-28 Identity = 35.29%
AB1752	1	gi 157164262 ref YP_001465981.1	Campylobacter concisus 13826	E-value = 2.00E-51 Identity = 31.87%
	2	gi 154174366 ref YP_001407417.1	Campylobacter curvus 525.92	E-value = 2.00E-50 Identity = 29.92%
	3	gi 154148592 ref YP_001407034.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-50 Identity = 29.07%
	4	gi 118475351 ref YP_892848.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-44 Identity = 28.71%
	5	gi 34556709 ref NP_906524.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-43 Identity = 26.50%
AB1753	1	gi 154173905 ref YP_001407416.1	Campylobacter curvus 525.92	E-value = 4.00E-64 Identity = 47.71%
	2	gi 157165776 ref YP_001465980.1	Campylobacter concisus 13826	E-value = 1.00E-61 Identity = 47.06%
	3	gi 78357251 ref YP_388700.1	Desulfovibrio desulfuricans G20	E-value = 1.00E-60 Identity = 40.07%
	4	gi 152992656 ref YP_001358377.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-59 Identity = 41.04%
	5	gi 116747475 ref YP_844162.1	Syntrophobacter fumaroxidans MPOB	E-value = 7.00E-59 Identity = 42.66%
AB1754	1	gi 106879748 emb CAJ90443.1	Leptospira biflexa serovar Patoc	E-value = 2.00E-11 Identity = 34.13%
	2	gi 154148068 ref YP_001406103.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-09 Identity = 33.33%
	3	gi 149176351 ref ZP_01854965.1	Planctomyces maris DSM 8797	E-value = 2.00E-09 Identity = 29.84%
	4	gi 154685336 ref YP_001420497.1	Bacillus amyloliquefaciens FZB42	E-value = 3.00E-09 Identity = 32.31%
	5	gi 157164717 ref YP_001465979.1	Campylobacter concisus 13826	E-value = 3.00E-09 Identity = 35.29%
AB1755	1	gi 34557615 ref NP_907430.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-92 Identity = 48.46%
	2	gi 108563926 ref YP_628242.1	Helicobacter pylori HPAG1	E-value = 5.00E-88 Identity = 47.86%
	3	gi 15612512 ref NP_224165.1	Helicobacter pylori J99	E-value = 1.00E-86 Identity = 47.14%
	4	gi 109946902 ref YP_664130.1	Helicobacter acinonychis str. Sheeba	E-value = 6.00E-86 Identity = 48.33%
	5	gi 15646159 ref NP_208343.1	Helicobacter pylori 26695	E-value = 2.00E-85 Identity = 47.07%
AB1756	1	gi 89093535 ref ZP_01166483.1	Oceanospirillum sp. MED92	E-value = 1.00E-117 Identity = 60.22%
	2	gi 15890039 ref NP_355720.1	Agrobacterium tumefaciens str. C58	E-value = 2.00E-107 Identity = 58.10%
	3	gi 86138431 ref ZP_01057005.1	Roseobacter sp. MED193	E-value = 2.00E-107 Identity = 54.55%
	4	gi 114764278 ref ZP_01443506.1	Roseovarius sp. HTCC2601	E-value = 9.00E-103 Identity = 54.52%
	5	gi 87121394 ref ZP_01077283.1	Marinomonas sp. MED121	E-value = 3.00E-104 Identity = 52.54%
AB1757	1	gi 148244802 ref YP_001219496.1	Candidatus Vesicomysocius okutanii HA	E-value = 2.00E-74 Identity = 53.08%
	2	gi 88860485 ref ZP_01135123.1	Pseudoalteromonas tunicata D2	E-value = 4.00E-52 Identity = 39.73%
	3	gi 87122422 ref ZP_01078302.1	Marinomonas sp. MED121	E-value = 9.00E-49 Identity = 40.07%
	4	gi 119505418 ref ZP_01627491.1	marine gamma proteobacterium HTCC2080	E-value = 2.00E-46 Identity = 36.63%
	5	gi 88799344 ref ZP_01114922.1	Reinekea sp. MED297	E-value = 4.00E-45 Identity = 37.21%
AB1758	1	gi 148244803 ref YP_001219497.1	Candidatus Vesicomysocius okutanii HA	E-value = 6.00E-53 Identity = 40.68%
AB1759	1	gi 118602701 ref YP_903916.1	Candidatus Ruthia magnifica str. Cm (Calyptogena magnifica)	E-value = 3.00E-117 Identity = 47.66%
	2	gi 148244804 ref YP_001219498.1	Candidatus Vesicomysocius okutanii HA	E-value = 4.00E-112 Identity = 48.96%



	3	gi 66047290 ref YP_237131.1	Pseudomonas syringae pv. syringae B728a	E-value = 7.00E-92	Identity = 42.26%
	4	gi 88799523 ref ZP_01115100.1	Reinekea sp. MED297	E-value = 2.00E-91	Identity = 41.69%
	5	gi 84316919 ref ZP_00965377.1	Pseudomonas aeruginosa C3719	E-value = 1.00E-90	Identity = 41.10%
AB1760	1	gi 148244805 ref YP_001219499.1	Candidatus Vesicomysocius okutanii HA	E-value = 1.00E-126	Identity = 54.42%
	2	gi 118602702 ref YP_903917.1	Candidatus Ruthia magnifica str. Cm (Calyptogena magnifica)	E-value = 4.00E-123	Identity = 55.09%
	3	gi 149921138 ref ZP_01909596.1	Plesiocystis pacifica SIR-1	E-value = 2.00E-54	Identity = 35.33%
	4	gi 124007535 ref ZP_01692240.1	Microscilla marina ATCC 23134	E-value = 4.00E-54	Identity = 39.42%
	5	gi 149927624 ref ZP_01915877.1	Limnobacter sp. MED105	E-value = 3.00E-52	Identity = 39.10%
AB1761	1	gi 34556620 ref NP_906435.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-61	Identity = 26.96%
	2	gi 78777839 ref YP_394154.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-59	Identity = 27.27%
	3	gi 32266498 ref NP_860530.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-53	Identity = 26.91%
	4	gi 154175302 ref YP_001408487.1	Campylobacter curvus 525.92	E-value = 4.00E-48	Identity = 26.88%
AB1763	1	gi 118474883 ref YP_892437.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-18	Identity = 77.88%
	2	gi 15792265 ref NP_282088.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-17	Identity = 72.48%
	3	gi 57242302 ref ZP_00370241.1	Campylobacter upsaliensis RM3195	E-value = 6.00E-17	Identity = 71.30%
	4	gi 57240616 ref ZP_00368565.1	Campylobacter lari RM2100	E-value = 8.00E-17	Identity = 81.37%
	5	gi 153951147 ref YP_001397995.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 4.00E-16	Identity = 81.18%
AB1764	1	gi 57241710 ref ZP_00369655.1	Campylobacter lari RM2100	E-value = 1.00E-63	Identity = 30.40%
	2	gi 34557692 ref NP_907507.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-63	Identity = 29.97%
	3	gi 154175075 ref YP_001408197.1	Campylobacter curvus 525.92	E-value = 8.00E-63	Identity = 27.91%
	4	gi 153951071 ref YP_001398694.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-62	Identity = 29.85%
	5	gi 118474782 ref YP_892818.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-61	Identity = 30.23%
AB1765	1	gi 146293482 ref YP_001183906.1	Shewanella putrefaciens CN-32	E-value = 3.00E-55	Identity = 38.39%
	2	gi 24374447 ref NP_718490.1	Shewanella oneidensis MR-1	E-value = 4.00E-55	Identity = 38.44%
	3	gi 120598439 ref YP_963013.1	Shewanella sp. W3-18-1	E-value = 5.00E-55	Identity = 38.39%
	4	gi 118072429 ref ZP_01540618.1	Shewanella woodyi ATCC 51908	E-value = 1.00E-54	Identity = 37.61%
	5	gi 117919992 ref YP_869184.1	Shewanella sp. ANA-3	E-value = 3.00E-54	Identity = 38.14%
AB1766	1	gi 146284065 ref YP_001174218.1	Pseudomonas stutzeri A1501	E-value = 2.00E-72	Identity = 52.47%
	2	gi 118589326 ref ZP_01546732.1	Stappia aggregata IAM 12614	E-value = 2.00E-66	Identity = 49.61%
	3	gi 114707297 ref ZP_01440194.1	Fulvimarina pelagi HTCC2506	E-value = 7.00E-63	Identity = 48.85%
	4	gi 86136791 ref ZP_01055369.1	Roseobacter sp. MED193	E-value = 3.00E-59	Identity = 45.88%
	5	gi 146291693 ref YP_001182117.1	Shewanella putrefaciens CN-32	E-value = 7.00E-59	Identity = 49.79%
AB1767	1		*** No matches found ***		
AB1768	1		*** No matches found ***		
AB1769	1	gi 34558044 ref NP_907859.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-11	Identity = 43.66%
	2	gi 152993990 ref YP_001359711.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-08	Identity = 39.71%
	3	gi 154147962 ref YP_001407002.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-06	Identity = 41.79%
AB1770	1	gi 34557186 ref NP_907001.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-53	Identity = 48.06%
	2	gi 85374878 ref YP_458940.1	Erythrobacter litoralis HTCC2594	E-value = 2.00E-45	Identity = 38.04%
	3	gi 85709356 ref ZP_01040421.1	Erythrobacter sp. NAP1	E-value = 1.00E-44	Identity = 40.47%
	4	gi 154503371 ref ZP_02040431.1	Ruminococcus gnavus ATCC 29149	E-value = 4.00E-44	Identity = 40.54%
	5	gi 83592438 ref YP_426190.1	Rhodospirillum rubrum ATCC 11170	E-value = 1.00E-42	Identity = 37.65%
AB1771	1	gi 152993343 ref YP_001359064.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-150	Identity = 64.88%
	2	gi 152990608 ref YP_001356330.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-142	Identity = 61.89%
	3	gi 78776991 ref YP_393306.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-139	Identity = 61.46%
	4	gi 149193842 ref ZP_01870940.1	Caminiabacter mediatlanticus TB-2	E-value = 1.00E-137	Identity = 59.12%
	5	gi 34557662 ref NP_907477.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-134	Identity = 58.64%
AB1772	1	gi 78776269 ref YP_392584.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-176	Identity = 53.46%
	2	gi 91775726 ref YP_545482.1	Methylobacillus flagellatus KT	E-value = 1.00E-72	Identity = 32.19%

	3	gi 56478932 ref YP_160521.1	Azoarcus sp. EbN1	E-value = 4.00E-72	Identity = 33.73%
	4	gi 27379723 ref NP_771252.1	Bradyrhizobium japonicum USDA 110	E-value = 9.00E-67	Identity = 31.61%
	5	gi 146340705 ref YP_001205753.1	Bradyrhizobium sp. ORS278	E-value = 1.00E-65	Identity = 31.02%
AB1773	1		<b>*** No matches found ***</b>		
AB1774	1	gi 152991668 ref YP_001357389.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-114	Identity = 48.67%
	2	gi 118474306 ref YP_891331.1	Campylobacter fetus subsp. fetus 82-40	E-value = 9.00E-110	Identity = 47.63%
	3	gi 34557050 ref NP_906865.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-109	Identity = 48.76%
	4	gi 152991354 ref YP_001357076.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-108	Identity = 45.19%
	5	gi 152989894 ref YP_001355616.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-108	Identity = 45.19%
AB1775	1		<b>*** No matches found ***</b>		
AB1776	1	gi 34557780 ref NP_907595.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-35	Identity = 40.28%
	2	gi 118475245 ref YP_891579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-28	Identity = 32.74%
	3	gi 152993408 ref YP_001359129.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-27	Identity = 35.11%
	4	gi 34558806 gb AAQ75151.1	Alvinella pompejana epibiont 6C6	E-value = 1.00E-26	Identity = 35.75%
	5	gi 157164839 ref YP_001466181.1	Campylobacter concisus 13826	E-value = 4.00E-26	Identity = 33.63%
AB1777	1 <i>ogt</i>	gi 151572627 gb EDN38281.1	Francisella tularensis subsp. novicida GA99-3548	E-value = 2.00E-32	Identity = 46.75%
	2	gi 151571175 gb EDN36829.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 7.00E-32	Identity = 46.15%
	3	gi 56708554 ref YP_170450.1	Francisella tularensis subsp. tularensis SCHU S4	E-value = 2.00E-31	Identity = 45.51%
	4	gi 54113435 gb AAV29351.1	synthetic construct	E-value = 3.00E-31	Identity = 45.51%
	5	gi 89255707 ref YP_513068.1	Francisella tularensis subsp. holarctica	E-value = 1.00E-30	Identity = 44.91%
AB1778	1	gi 152993517 ref YP_001359238.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-130	Identity = 50.32%
	2	gi 152991170 ref YP_001356892.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-130	Identity = 50.11%
	3	gi 78776822 ref YP_393137.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-126	Identity = 50.43%
	4	gi 34558288 ref NP_908103.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-116	Identity = 47.00%
	5	gi 118475128 ref YP_891312.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-113	Identity = 49.44%
AB1779	1	gi 34556848 ref NP_906663.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-63	Identity = 51.49%
	2	gi 152989799 ref YP_001355521.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-58	Identity = 48.52%
	3	gi 32266104 ref NP_860136.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-55	Identity = 50.21%
	4	gi 152993971 ref YP_001359692.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-52	Identity = 43.35%
	5	gi 78776215 ref YP_392530.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-50	Identity = 41.78%
AB1780	1	gi 34419513 ref NP_899526.1	Vibrio phage KVP40	E-value = 9.00E-17	Identity = 35.20%
	2	gi 38707641 ref NP_944779.1	Bacteriophage Felix 01	E-value = 1.00E-15	Identity = 36.08%
	3	gi 38707794 ref NP_944780.1	Bacteriophage Felix 01	E-value = 3.00E-14	Identity = 37.32%
	4	gi 38640206 ref NP_944162.1	Bacteriophage Aeh1	E-value = 9.00E-13	Identity = 29.41%
AB1781	1	gi 57240940 ref ZP_00368888.1	Campylobacter lari RM2100	E-value = 5.00E-30	Identity = 63.37%
	2	gi 118474607 ref YP_891318.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-27	Identity = 60.00%
	3	gi 15792707 ref NP_282530.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-27	Identity = 61.76%
	4	gi 154175460 ref YP_001407590.1	Campylobacter curvus 525.92	E-value = 2.00E-27	Identity = 57.28%
	5	gi 157165497 ref YP_001466149.1	Campylobacter concisus 13826	E-value = 3.00E-27	Identity = 60.00%
AB1782	1	gi 157165012 ref YP_001466150.1	Campylobacter concisus 13826	E-value = 2.00E-06	Identity = 26.70%
AB1783	1 <i>fldA</i>	gi 156108607 gb EDO10352.1	Bacteroides ovatus ATCC 8483	E-value = 5.00E-35	Identity = 49.69%
	2	gi 399495 sp P31158 FLAV_SYN2P	Synechococcus sp. PCC 7002	E-value = 3.00E-34	Identity = 47.83%
	3	gi 153806151 ref ZP_01958819.1	Bacteroides caccae ATCC 43185	E-value = 8.00E-34	Identity = 47.24%
	4	gi 15792705 ref NP_282528.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 8.00E-34	Identity = 49.69%
	5	gi 150005724 ref YP_001300468.1	Bacteroides vulgatus ATCC 8482	E-value = 1.00E-33	Identity = 49.08%
AB1784	1 <i>fur2</i>	gi 157164982 ref YP_001467460.1	Campylobacter concisus 13826	E-value = 5.00E-37	Identity = 51.68%
	2	gi 154174593 ref YP_001407788.1	Campylobacter curvus 525.92	E-value = 5.00E-37	Identity = 52.35%
	3	gi 57168539 ref ZP_00367672.1	Campylobacter coli RM2228	E-value = 6.00E-37	Identity = 54.00%
	4	gi 118474524 ref YP_892301.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-36	Identity = 51.75%

	5	gi 15791767 ref NP_281590.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-36	Identity = 53.38%
AB1785	1		*** No matches found ***		
AB1786	1	ate gi 34557640 ref NP_907455.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-67	Identity = 52.79%
	2	gi 32267328 ref NP_861360.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-60	Identity = 45.73%
	3	gi 152989910 ref YP_001355632.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-56	Identity = 47.35%
	4	gi 152993285 ref YP_001359006.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-55	Identity = 46.02%
	5	gi 153951214 ref YP_001397883.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-53	Identity = 49.56%
AB1787	1	trpA gi 152993675 ref YP_001359396.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-83	Identity = 61.89%
	2	gi 152990123 ref YP_001355845.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-79	Identity = 58.37%
	3	gi 78777878 ref YP_394193.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-74	Identity = 57.96%
	4	gi 34558127 ref NP_907942.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-71	Identity = 57.32%
	5	gi 149195241 ref ZP_01872330.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-68	Identity = 56.10%
AB1788	1	gi 152991483 ref YP_001357205.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-132	Identity = 59.00%
	2	gi 152991861 ref YP_001357582.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-126	Identity = 58.28%
	3	gi 145617940 ref ZP_01774002.1	Geobacter bemidjensis Bem	E-value = 3.00E-84	Identity = 44.50%
	4	gi 118581673 ref YP_902923.1	Pelobacter propionicus DSM 2379	E-value = 1.00E-76	Identity = 40.75%
	5	gi 83748726 ref ZP_00945742.1	Ralstonia solanacearum UW551	E-value = 5.00E-63	Identity = 35.82%
AB1789	1	panB gi 78777876 ref YP_394191.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-97	Identity = 67.43%
	2	gi 152990122 ref YP_001355844.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-94	Identity = 64.37%
	3	gi 149195242 ref ZP_01872331.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-88	Identity = 65.59%
	4	gi 152993674 ref YP_001359395.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-86	Identity = 60.15%
	5	gi 109947699 ref YP_664927.1	Helicobacter acinonychis str. Sheeba	E-value = 4.00E-83	Identity = 54.65%
AB1790	1	ruvB gi 152993673 ref YP_001359394.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-139	Identity = 76.45%
	2	gi 78777875 ref YP_394190.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-135	Identity = 74.24%
	3	gi 157165204 ref YP_001467229.1	Campylobacter concisus 13826	E-value = 5.00E-134	Identity = 72.78%
	4	gi 154174013 ref YP_001408691.1	Campylobacter curvus 525.92	E-value = 3.00E-132	Identity = 71.56%
	5	gi 152990121 ref YP_001355843.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-131	Identity = 74.09%
AB1791	1	amaA gi 152990120 ref YP_001355842.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-54	Identity = 41.23%
	2	gi 154173718 ref YP_001408692.1	Campylobacter curvus 525.92	E-value = 6.00E-53	Identity = 41.61%
	3	gi 152993672 ref YP_001359393.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-52	Identity = 38.87%
	4	gi 157164430 ref YP_001467226.1	Campylobacter concisus 13826	E-value = 2.00E-52	Identity = 41.37%
	5	gi 154149249 ref YP_001406317.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-52	Identity = 37.09%
AB1792	1	gi 152993921 ref YP_001359642.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-69	Identity = 54.73%
	2	gi 78777571 ref YP_393886.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-64	Identity = 50.00%
	3	gi 149195059 ref ZP_01872151.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-46	Identity = 43.50%
AB1795	1	gi 152993193 ref YP_001358914.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-78	Identity = 53.95%
	2	gi 157164348 ref YP_001467204.1	Campylobacter concisus 13826	E-value = 6.00E-75	Identity = 49.16%
	3	gi 34556807 ref NP_906622.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-69	Identity = 46.31%
	4	gi 152990234 ref YP_001355956.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-67	Identity = 48.82%
	5	gi 57241003 ref ZP_00368950.1	Campylobacter lari RM2100	E-value = 2.00E-64	Identity = 45.18%
AB1796	1	hemE gi 152993199 ref YP_001358920.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-175	Identity = 83.77%
	2	gi 78776833 ref YP_393148.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-171	Identity = 82.90%
	3	gi 152990235 ref YP_001355957.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-134	Identity = 66.76%
	4	gi 154149184 ref YP_001406819.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-131	Identity = 62.65%
	5	gi 57241002 ref ZP_00368949.1	Campylobacter lari RM2100	E-value = 5.00E-129	Identity = 64.91%
AB1797	1	gi 78776834 ref YP_393149.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-49	Identity = 65.29%
	2	gi 152993200 ref YP_001358921.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-46	Identity = 69.01%
	3	gi 114777342 ref ZP_01452339.1	Mariprofundus ferrooxydans PV-1	E-value = 1.00E-45	Identity = 61.76%
	4	gi 152990236 ref YP_001355958.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-41	Identity = 61.82%

	5	gi 149193740 ref ZP_01870838.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-38	Identity = 56.36%
AB1798	1	gi 152993201 ref YP_001358922.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-147	Identity = 77.33%
	2	gi 154175060 ref YP_001408746.1	Campylobacter curvus 525.92	E-value = 1.00E-128	Identity = 69.12%
	3	gi 118474950 ref YP_892594.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-128	Identity = 67.25%
	4	gi 57241000 ref ZP_00368947.1	Campylobacter lari RM2100	E-value = 2.00E-126	Identity = 67.86%
	5	gi 57168893 ref ZP_00368023.1	Campylobacter coli RM2228	E-value = 4.00E-126	Identity = 66.67%
AB1799	1	gi 118574930 gb ABL07042.1	Arcobacter cryaerophilus	E-value = 0	Identity = 92.67%
	2	gi 118574932 gb ABL07043.1	Arcobacter cibarius	E-value = 0	Identity = 91.93%
	3	gi 118574934 gb ABL07044.1	Arcobacter skirrowii	E-value = 0	Identity = 87.24%
	4	gi 118647919 gb ABL09947.1	Arcobacter nitrofigilis	E-value = 0	Identity = 83.04%
	5	gi 152993202 ref YP_001358923.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 73.18%
AB1800	1	gi 118030969 ref ZP_01502425.1	Burkholderia phymatum STM815	E-value = 1.00E-08	Identity = 56.06%
	2	gi 91777490 ref YP_552698.1	Burkholderia xenovorans LB400	E-value = 3.00E-08	Identity = 51.47%
	3	gi 121583416 ref YP_973847.1	Polaromonas naphthalenivorans CJ2	E-value = 3.00E-07	Identity = 50.00%
	4	gi 94313780 ref YP_586989.1	Ralstonia metallidurans CH34	E-value = 7.00E-07	Identity = 50.00%
	5	gi 73540816 ref YP_295336.1	Ralstonia eutropha JMP134	E-value = 9.00E-07	Identity = 53.03%
AB1801	1	gi 152990067 ref YP_001355789.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-125	Identity = 59.90%
	2	gi 118475747 ref YP_892141.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-122	Identity = 58.73%
	3	gi 78777797 ref YP_394112.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-120	Identity = 58.99%
	4	gi 154174867 ref YP_001408513.1	Campylobacter curvus 525.92	E-value = 7.00E-120	Identity = 56.68%
	5	gi 152993736 ref YP_001359457.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-117	Identity = 51.90%
AB1802	1	gi 34556764 ref NP_906579.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-111	Identity = 55.47%
	2	gi 32266789 ref NP_860821.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-102	Identity = 48.26%
	3	gi 152993735 ref YP_001359456.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-98	Identity = 49.20%
	4	gi 78777798 ref YP_394113.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-97	Identity = 49.34%
	5	gi 157165610 ref YP_001466761.1	Campylobacter concisus 13826	E-value = 2.00E-95	Identity = 47.61%
AB1803	1	gi 148925829 ref ZP_01809516.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 3.00E-13	Identity = 75.81%
	2	gi 78777799 ref YP_394114.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-13	Identity = 77.42%
	3	gi 153951942 ref YP_001398512.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 9.00E-13	Identity = 75.81%
	4	gi 154173798 ref YP_001408511.1	Campylobacter curvus 525.92	E-value = 1.00E-12	Identity = 74.19%
	5	gi 118475728 ref YP_892139.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-12	Identity = 74.19%
AB1804	1		<b>*** No matches found ***</b>		
AB1805	1	gi 100064556 ref ZP_01325947.1	Burkholderia pseudomallei Pasteur	E-value = 2.00E-20	Identity = 43.36%
	2	gi 303564 dbj BAA03661.1	Escherichia coli W3110	E-value = 1.00E-18	Identity = 33.33%
AB1806	1	gi 78776778 ref YP_393093.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-126	Identity = 69.94%
	2	gi 152991191 ref YP_001356913.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-109	Identity = 62.80%
	3	gi 154175499 ref YP_001408599.1	Campylobacter curvus 525.92	E-value = 2.00E-102	Identity = 60.42%
	4	gi 157164747 ref YP_001467035.1	Campylobacter concisus 13826	E-value = 6.00E-99	Identity = 59.82%
	5	gi 118474525 ref YP_892553.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-98	Identity = 62.04%
AB1807	1	gi 78776779 ref YP_393094.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-158	Identity = 62.92%
	2	gi 34557093 ref NP_906908.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-142	Identity = 56.10%
	3	gi 152991190 ref YP_001356912.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-140	Identity = 56.99%
	4	gi 154174008 ref YP_001408598.1	Campylobacter curvus 525.92	E-value = 4.00E-129	Identity = 53.81%
	5	gi 118475685 ref YP_892552.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-127	Identity = 54.64%
AB1808	1	gi 34557094 ref NP_906909.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-64	Identity = 66.30%
	2	gi 32267030 ref NP_861062.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-63	Identity = 63.98%
	3	gi 154173847 ref YP_001408597.1	Campylobacter curvus 525.92	E-value = 5.00E-63	Identity = 68.33%
	4	gi 108563265 ref YP_627581.1	Helicobacter pylori HPAG1	E-value = 1.00E-61	Identity = 63.78%
	5	gi 118475208 ref YP_892550.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-61	Identity = 67.03%

AB1809	1	gi 78776520 ref YP_392835.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-169	Identity = 51.64%
	2	gi 153093040 gb EDN74056.1	Mannheimia haemolytica PHL213	E-value = 8.00E-115	Identity = 39.06%
	3	gi 146302750 ref YP_001197341.1	Flavobacterium johnsoniae UW101	E-value = 4.00E-114	Identity = 40.06%
	4	gi 126208280 ref YP_001053505.1	Actinobacillus pleuropneumoniae L20	E-value = 7.00E-112	Identity = 39.60%
	5	gi 46143507 ref ZP_00135083.2	Actinobacillus pleuropneumoniae serovar 1 str. 4074	E-value = 7.00E-112	Identity = 39.60%
AB1810	1	gi 157163923 ref YP_001467320.1	Campylobacter concisus 13826	E-value = 6.00E-82	Identity = 49.52%
	2	gi 154173877 ref YP_001407683.1	Campylobacter curvus 525.92	E-value = 2.00E-81	Identity = 46.28%
	3	gi 118474261 ref YP_892549.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-77	Identity = 50.51%
	4	gi 78776781 ref YP_393096.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-75	Identity = 43.96%
	5	gi 57168029 ref ZP_00367168.1	Campylobacter coli RM2228	E-value = 4.00E-74	Identity = 46.50%
AB1811	1	gi 78776782 ref YP_393097.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-80	Identity = 47.28%
	2	gi 54298941 ref YP_125310.1	Legionella pneumophila str. Paris	E-value = 2.00E-68	Identity = 41.46%
AB1812	1	gi 78776784 ref YP_393099.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-52	Identity = 39.06%
	2	gi 149189222 ref ZP_01867509.1	Vibrio shilonii AK1	E-value = 5.00E-42	Identity = 34.98%
	3	gi 37678477 ref NP_933086.1	Vibrio vulnificus YJ016	E-value = 9.00E-42	Identity = 34.54%
	4	gi 126207905 ref YP_001053130.1	Actinobacillus pleuropneumoniae L20	E-value = 9.00E-40	Identity = 34.42%
	5	gi 15603159 ref NP_246231.1	Pasteurella multocida subsp. multocida str. Pm70	E-value = 1.00E-39	Identity = 35.00%
AB1813	1	gi 78776786 ref YP_393101.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-48	Identity = 48.28%
	2	gi 54298940 ref YP_125309.1	Legionella pneumophila str. Paris	E-value = 5.00E-37	Identity = 40.83%
	3	gi 60679778 ref YP_209922.1	Bacteroides fragilis NCTC 9343	E-value = 1.00E-33	Identity = 32.60%
	4	gi 53711515 ref YP_097507.1	Bacteroides fragilis YCH46	E-value = 2.00E-33	Identity = 32.60%
	5	gi 149370606 ref ZP_01890295.1	unidentified eubacterium SCB49	E-value = 3.00E-32	Identity = 37.44%
AB1814	1	gi 152991157 ref YP_001356879.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-48	Identity = 31.84%
	2	gi 149189229 ref ZP_01867516.1	Vibrio shilonii AK1	E-value = 2.00E-48	Identity = 27.22%
	3	gi 94501600 ref ZP_01308117.1	Oceanobacter sp. RED65	E-value = 7.00E-42	Identity = 30.91%
	4	gi 15677836 ref NP_275002.1	Neisseria meningitidis MC58	E-value = 3.00E-39	Identity = 26.77%
	5	gi 121635666 ref YP_975911.1	Neisseria meningitidis FAM18	E-value = 4.00E-39	Identity = 27.51%
AB1815	1	gi 157148778 ref YP_001456097.1	Citrobacter koseri ATCC BAA-895	E-value = 2.00E-22	Identity = 31.55%
	2	gi 68552600 ref ZP_00591988.1	Prosthecochloris aestuarii DSM 271	E-value = 3.00E-22	Identity = 32.79%
	3	gi 74313744 ref YP_312163.1	Shigella sonnei Ss046	E-value = 4.00E-22	Identity = 31.55%
	4	gi 75235393 ref ZP_00719606.1	Escherichia coli F11	E-value = 5.00E-22	Identity = 31.55%
	5	gi 145219499 ref YP_001130208.1	Prosthecochloris vibrioformis DSM 265	E-value = 5.00E-22	Identity = 33.16%
AB1816	1		<b>*** No matches found ***</b>		
AB1817	1	gi 118602180 ref YP_903395.1	Candidatus Ruthia magnifica str. Cm (Calyptogena magnifica)	E-value = 2.00E-157	Identity = 64.96%
	2	gi 152993121 ref YP_001358842.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-142	Identity = 61.02%
	3	gi 154174890 ref YP_001407538.1	Campylobacter curvus 525.92	E-value = 8.00E-140	Identity = 61.52%
	4	gi 114565689 ref YP_752843.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 1.00E-136	Identity = 58.02%
	5	gi 52144432 ref YP_082397.1	Bacillus cereus E33L	E-value = 5.00E-131	Identity = 56.10%
AB1818	1	gi 94264214 ref ZP_01288010.1	delta proteobacterium MLMS-1	E-value = 6.00E-62	Identity = 34.53%
	2	gi 119944121 ref YP_941801.1	Psychromonas ingrahamii 37	E-value = 2.00E-41	Identity = 32.05%
	3	gi 92112149 ref YP_572077.1	Chromohalobacter salexigens DSM 3043	E-value = 3.00E-27	Identity = 26.10%
	4	gi 124006976 ref ZP_01691805.1	Microscilla marina ATCC 23134	E-value = 3.00E-26	Identity = 27.10%
	5	gi 20807430 ref NP_622601.1	Thermoanaerobacter tengcongensis MB4	E-value = 8.00E-22	Identity = 32.30%
AB1819	1	gi 152997483 ref YP_001342318.1	Marinomonas sp. MWYL1	E-value = 8.00E-60	Identity = 47.18%
	2	gi 94264206 ref ZP_01288002.1	delta proteobacterium MLMS-1	E-value = 4.00E-59	Identity = 48.74%
	3	gi 92112147 ref YP_572075.1	Chromohalobacter salexigens DSM 3043	E-value = 3.00E-58	Identity = 44.98%
	4	gi 87119522 ref ZP_01075419.1	Marinomonas sp. MED121	E-value = 6.00E-57	Identity = 46.37%
	5	gi 126662046 ref ZP_01733045.1	Flavobacteria bacterium BAL38	E-value = 6.00E-50	Identity = 41.77%
AB1820	1	gi 118474603 ref YP_892527.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-08	Identity = 26.28%

	2	gi 729025 sp P39857 CAPH_STAAU	Staphylococcus aureus	E-value = 5.00E-08	Identity = 26.32%
AB1821	1	gi 84489253 ref YP_447485.1	Methanosphaera stadmanae DSM 3091	E-value = 1.00E-27	Identity = 33.33%
	2	gi 156869426 gb EDO62798.1	Clostridium leptum DSM 753	E-value = 2.00E-25	Identity = 32.97%
	3	gi 150008821 ref YP_001303564.1	Parabacteroides distasonis ATCC 8503	E-value = 2.00E-25	Identity = 32.45%
	4	gi 14389021 gb AAK61903.1 AF373595_12	Streptococcus thermophilus	E-value = 3.00E-25	Identity = 32.35%
	5	gi 60683259 ref YP_213403.1	Bacteroides fragilis NCTC 9343	E-value = 3.00E-24	Identity = 31.56%
AB1822	1	gi 152995829 ref YP_001340664.1	Marinomonas sp. MWYL1	E-value = 3.00E-20	Identity = 35.48%
	2	gi 75235393 ref ZP_00719606.1	Escherichia coli F11	E-value = 1.00E-18	Identity = 30.27%
	3	gi 26249793 ref NP_755833.1	Escherichia coli CFT073	E-value = 2.00E-18	Identity = 29.73%
	4	gi 15803747 ref NP_289781.1	Escherichia coli O157:H7 EDL933	E-value = 5.00E-18	Identity = 29.73%
	5	gi 82545556 ref YP_409503.1	Shigella boydii Sb227	E-value = 5.00E-18	Identity = 29.73%
AB1823	1	gi 119356194 ref YP_910838.1	Chlorobium phaeobacteroides DSM 266	E-value = 2.00E-53	Identity = 35.84%
	2	gi 121997570 ref YP_001002357.1	Halorhodospira halophila SL1	E-value = 3.00E-43	Identity = 29.18%
	3	gi 157413793 ref YP_001484659.1	Prochlorococcus marinus str. MIT 9215	E-value = 3.00E-29	Identity = 30.49%
	4	gi 117923487 ref YP_864104.1	Magnetococcus sp. MC-1	E-value = 1.00E-24	Identity = 29.24%
	5	gi 20807153 ref NP_622324.1	Thermoanaerobacter tengcongensis MB4	E-value = 8.00E-07	Identity = 26.40%
AB1824	1	gi 67940520 ref ZP_00532922.1	Chlorobium phaeobacteroides BS1	E-value = 2.00E-25	Identity = 27.30%
	2	gi 152993528 ref YP_001359249.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-20	Identity = 27.78%
	3	gi 149195184 ref ZP_01872275.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-17	Identity = 26.43%
	4	gi 78777895 ref YP_394210.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-17	Identity = 25.84%
AB1825	1	gi 56708496 ref YP_170392.1	Francisella tularensis subsp. tularensis SCHU S4	E-value = 1.00E-130	Identity = 68.51%
	2	gi 157121752 gb EDO65922.1	Francisella tularensis subsp. holarctica FSC022	E-value = 3.00E-130	Identity = 68.51%
	3	gi 146282129 ref YP_001172282.1	Pseudomonas stutzeri A1501	E-value = 2.00E-113	Identity = 55.81%
	4	gi 71735150 ref YP_275305.1	Pseudomonas syringae pv. phaseolicola 1448A	E-value = 8.00E-110	Identity = 52.97%
	5	gi 66046450 ref YP_236291.1	Pseudomonas syringae pv. syringae B728a	E-value = 1.00E-109	Identity = 51.84%
AB1826	1	gi 149195143 ref ZP_01872234.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-155	Identity = 78.74%
	2	gi 152993139 ref YP_001358860.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-143	Identity = 60.22%
	3	gi 45250013 gb AAS55726.1	Aneurinibacillus thermoaerophilus	E-value = 2.00E-131	Identity = 69.85%
	4	gi 126662747 ref ZP_01733746.1	Flavobacteria bacterium BAL38	E-value = 7.00E-131	Identity = 67.95%
	5	gi 86135155 ref ZP_01053737.1	Tenacibaculum sp. MED152	E-value = 7.00E-131	Identity = 68.66%
AB1827	1	gi 152993140 ref YP_001358861.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-126	Identity = 73.70%
	2	gi 29725990 gb AAO88922.1	Vibrio cholerae	E-value = 9.00E-124	Identity = 72.57%
	3	gi 86147260 ref ZP_01065575.1	Vibrio sp. MED222	E-value = 1.00E-123	Identity = 72.92%
	4	gi 148976931 ref ZP_01813586.1	Vibrionales bacterium SWAT-3	E-value = 1.00E-123	Identity = 72.57%
	5	gi 126175092 ref YP_001051241.1	Shewanella baltica OS155	E-value = 2.00E-123	Identity = 74.13%
AB1829	1	gi 42523997 ref NP_969377.1	Bdellovibrio bacteriovorus HD100	E-value = 2.00E-86	Identity = 32.17%
	2	gi 27364269 ref NP_759797.1	Vibrio vulnificus CMCP6	E-value = 4.00E-53	Identity = 26.90%
	3	gi 37678475 ref NP_933084.1	Vibrio vulnificus YJ016	E-value = 2.00E-52	Identity = 27.09%
	4	gi 77978553 ref ZP_00833980.1	Yersinia intermedia ATCC 29909	E-value = 1.00E-51	Identity = 28.85%
	5	gi 77956456 ref ZP_00820553.1	Yersinia bercovieri ATCC 43970	E-value = 2.00E-51	Identity = 26.81%
AB1830	1	gi 78776519 ref YP_392834.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-22	Identity = 53.91%
	2	gi 154174822 ref YP_001407409.1	Campylobacter curvus 525.92	E-value = 2.00E-19	Identity = 47.83%
	3	gi 34557058 ref NP_906873.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-16	Identity = 40.18%
	4	gi 148926402 ref ZP_01810086.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-15	Identity = 46.43%
	5	gi 126174077 ref YP_001050226.1	Shewanella baltica OS155	E-value = 2.00E-15	Identity = 43.86%
AB1831	1	gi 52425503 ref YP_088640.1	Mannheimia succiniciproducens MBEL55E	E-value = 8.00E-13	Identity = 28.99%
	2	gi 68249995 ref YP_249107.1	Haemophilus influenzae 86-028NP	E-value = 2.00E-11	Identity = 26.77%
	3	gi 148826017 ref YP_001290770.1	Haemophilus influenzae PittEE	E-value = 2.00E-11	Identity = 26.77%
	4	gi 157165010 ref YP_001467761.1	Campylobacter concisus 13826	E-value = 2.00E-10	Identity = 30.00%

	5	gi 32029690 ref ZP_00132673.1	Haemophilus somnus 2336	E-value = 2.00E-10	Identity = 27.47%
AB1832	1	gi 34558202 ref NP_908017.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-40	Identity = 34.80%
	2	gi 118475340 ref YP_892541.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-37	Identity = 34.33%
	3	gi 78777873 ref YP_394188.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-35	Identity = 34.40%
	4	gi 154174903 ref YP_001407691.1	Campylobacter curvus 525.92	E-value = 7.00E-33	Identity = 31.99%
	5	gi 157165600 ref YP_001467312.1	Campylobacter concisus 13826	E-value = 6.00E-31	Identity = 31.77%
AB1833	1	gi 78776788 ref YP_393103.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-81	Identity = 54.08%
	2	gi 118474382 ref YP_892540.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-59	Identity = 43.33%
	3	gi 57241555 ref ZP_00369501.1	Campylobacter lari RM2100	E-value = 4.00E-59	Identity = 42.82%
	4	gi 157164075 ref YP_001467311.1	Campylobacter concisus 13826	E-value = 7.00E-57	Identity = 41.49%
	5	gi 118744273 ref ZP_01592268.1	Geobacter lovleyi SZ	E-value = 2.00E-56	Identity = 37.65%
AB1834	1	gi 32266483 ref NP_860515.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-119	Identity = 46.46%
	2	gi 152990157 ref YP_001355879.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-119	Identity = 47.63%
	3	gi 149194897 ref ZP_01871991.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-114	Identity = 50.00%
	4	gi 109947129 ref YP_664357.1	Helicobacter acinonychis str. Sheeba	E-value = 3.00E-112	Identity = 45.21%
	5	gi 108562705 ref YP_627021.1	Helicobacter pylori HPAG1	E-value = 6.00E-112	Identity = 44.60%
AB1835	1	gi 152990158 ref YP_001355880.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-21	Identity = 78.31%
	2	gi 152993563 ref YP_001359284.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-21	Identity = 79.52%
	3	gi 34558205 ref NP_908020.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-21	Identity = 78.31%
	4	gi 109947128 ref YP_664356.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-20	Identity = 73.17%
	5	gi 78776861 ref YP_393176.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-20	Identity = 74.70%
AB1836	1	gi 32266738 ref NP_860770.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-37	Identity = 40.24%
	2	gi 57168701 ref ZP_00367833.1	Campylobacter coli RM2228	E-value = 3.00E-36	Identity = 40.17%
	3	gi 86153692 ref ZP_01071895.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 8.00E-36	Identity = 38.59%
	4	gi 15791516 ref NP_281339.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 8.00E-36	Identity = 39.00%
	5	gi 121613474 ref YP_999852.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 9.00E-36	Identity = 38.59%
AB1837	1	gi 152990944 ref YP_001356666.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-155	Identity = 57.61%
	2	gi 34557570 ref NP_907385.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-151	Identity = 58.39%
	3	gi 78777373 ref YP_393688.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-145	Identity = 53.48%
	4	gi 77919084 ref YP_356899.1	Pelobacter carbinolicus DSM 2380	E-value = 2.00E-131	Identity = 52.60%
	5	gi 95928931 ref ZP_01311676.1	Desulfuromonas acetoxidans DSM 684	E-value = 8.00E-131	Identity = 50.98%
AB1838	1	gi 152990945 ref YP_001356667.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 65.74%
	2	gi 34557571 ref NP_907386.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 65.51%
	3	gi 78777374 ref YP_393689.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 64.41%
	4	gi 152992501 ref YP_001358222.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 61.13%
	5	gi 77919083 ref YP_356898.1	Pelobacter carbinolicus DSM 2380	E-value = 0	Identity = 59.24%
AB1839	1	gi 78776943 ref YP_393258.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-34	Identity = 43.41%
	2	gi 154149146 ref YP_001405924.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-19	Identity = 29.63%
	3	gi 152990987 ref YP_001356709.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-16	Identity = 27.85%
	4	gi 157165130 ref YP_001467532.1	Campylobacter concisus 13826	E-value = 3.00E-13	Identity = 27.64%
	5	gi 154174455 ref YP_001407637.1	Campylobacter curvus 525.92	E-value = 4.00E-13	Identity = 27.16%
AB1840	1	gi 152992962 ref YP_001358683.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-66	Identity = 47.29%
	2	gi 78777889 ref YP_394204.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-60	Identity = 47.29%
	3	gi 65317439 ref ZP_00390398.1	Bacillus anthracis str. A2012	E-value = 6.00E-45	Identity = 36.74%
	4	gi 30265476 ref NP_847853.1	Bacillus anthracis str. Ames	E-value = 1.00E-44	Identity = 36.74%
	5	gi 30023483 ref NP_835114.1	Bacillus cereus ATCC 14579	E-value = 1.00E-44	Identity = 37.12%
AB1841	1	gi 34557258 ref NP_907073.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-73	Identity = 28.93%
	2	gi 57242486 ref ZP_00370424.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-57	Identity = 27.55%
	3	gi 153952201 ref YP_001398807.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 4.00E-57	Identity = 27.85%

	4	gi 57242629 ref ZP_00370566.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-55	Identity = 27.72%
	5	gi 157415728 ref YP_001482984.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 6.00E-55	Identity = 27.83%
AB1842	1	gi 34558144 ref NP_907959.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-46	Identity = 30.69%
	2	gi 34557328 ref NP_907143.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-42	Identity = 30.82%
	3	gi 34558241 ref NP_908056.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-42	Identity = 32.01%
	4	gi 34558248 ref NP_908063.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-41	Identity = 31.90%
AB1843	1		*** No matches found ***		
AB1844	1	<i>gspD</i>	*** No matches found ***		
AB1845	1	gi 57240784 ref ZP_00368732.1	Campylobacter lari RM2100	E-value = 9.00E-40	Identity = 51.11%
	2	gi 152993253 ref YP_001358974.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-39	Identity = 50.00%
	3	gi 15791796 ref NP_281619.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-38	Identity = 50.00%
	4	gi 153952063 ref YP_001398535.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-37	Identity = 50.00%
	5	gi 86153740 ref ZP_01071943.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-37	Identity = 50.57%
AB1846	1	<i>tlyA</i>	Caminibacter mediatlanticus TB-2	E-value = 3.00E-53	Identity = 55.80%
	2	gi 149193898 ref ZP_01870996.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-52	Identity = 52.59%
	3	gi 152992058 ref YP_001357779.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-50	Identity = 46.78%
	4	gi 57241144 ref ZP_00369091.1	Campylobacter lari RM2100	E-value = 1.00E-49	Identity = 50.84%
	5	gi 57241998 ref ZP_00369938.1	Campylobacter upsaliensis RM3195	E-value = 8.00E-49	Identity = 48.89%
AB1847	1	<i>ribF</i>	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-70	Identity = 47.94%
	2	gi 157165726 ref YP_001467144.1	Campylobacter concisus 13826	E-value = 2.00E-66	Identity = 49.81%
	3	gi 154175170 ref YP_001408018.1	Campylobacter curvus 525.92	E-value = 1.00E-65	Identity = 49.07%
	4	gi 152990875 ref YP_001356597.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-64	Identity = 47.67%
	5	gi 152992059 ref YP_001357780.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-63	Identity = 48.66%
AB1848	1	gi 78776711 ref YP_393026.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-73	Identity = 64.26%
	2	gi 152990873 ref YP_001356595.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-72	Identity = 60.94%
	3	gi 149193761 ref ZP_01870859.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-72	Identity = 65.11%
	4	gi 34557004 ref NP_906819.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-68	Identity = 56.12%
	5	gi 152992061 ref YP_001357782.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-66	Identity = 57.02%
AB1849	1	<i>bcp</i>	Sulfurovum sp. NBC37-1	E-value = 1.00E-54	Identity = 62.28%
	2	gi 78777997 ref YP_394312.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-50	Identity = 59.74%
	3	gi 152991280 ref YP_001357002.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-46	Identity = 53.61%
	4	gi 126658834 ref ZP_01729978.1	Cyanothece sp. CCY0110	E-value = 6.00E-43	Identity = 51.20%
	5	gi 34556641 ref NP_906456.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-42	Identity = 51.53%
AB1850	1		*** No matches found ***		
AB1851	1	<i>glcD</i>	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 75.97%
	2	gi 118474967 ref YP_891868.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 70.72%
	3	gi 78776573 ref YP_392888.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 68.40%
	4	gi 34556706 ref NP_906521.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 68.40%
	5	gi 154148549 ref YP_001407138.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 67.46%
AB1852	1	<i>rbn</i>	Sulfurovum sp. NBC37-1	E-value = 4.00E-33	Identity = 39.18%
	2	gi 152990089 ref YP_001355811.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-32	Identity = 38.19%
	3	gi 32267229 ref NP_861261.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-29	Identity = 34.44%
	4	gi 78776574 ref YP_392889.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-26	Identity = 34.80%
	5	gi 154174119 ref YP_001408500.1	Campylobacter curvus 525.92	E-value = 2.00E-26	Identity = 33.58%
AB1853	1		*** No matches found ***		
AB1854	1	<i>murA</i>	Campylobacter concisus 13826	E-value = 2.00E-156	Identity = 67.77%
	2	gi 154174374 ref YP_001408257.1	Campylobacter curvus 525.92	E-value = 2.00E-153	Identity = 67.54%
	3	gi 78776755 ref YP_393070.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-151	Identity = 68.09%
	4	gi 152990702 ref YP_001356424.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-151	Identity = 65.80%



	5	gi 152992781 ref YP_001358502.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-148	Identity = 66.82%
AB1855	1	gi 152991109 ref YP_001356831.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-78	Identity = 61.03%
	2	gi 152993504 ref YP_001359225.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-75	Identity = 57.59%
	3	gi 78776601 ref YP_392916.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-71	Identity = 54.30%
	4	gi 118475229 ref YP_892484.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-68	Identity = 56.79%
	5	gi 57505515 ref ZP_00371442.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-59	Identity = 48.12%
AB1856	1	gi 154174222 ref YP_001407735.1	Campylobacter curvus 525.92	E-value = 1.00E-102	Identity = 66.29%
	2	gi 118474288 ref YP_892483.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-101	Identity = 65.66%
	3	gi 157164076 ref YP_001466231.1	Campylobacter concisus 13826	E-value = 1.00E-100	Identity = 64.39%
	4	gi 154148818 ref YP_001405676.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-98	Identity = 63.02%
	5	gi 78776602 ref YP_392917.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-94	Identity = 61.07%
AB1857	1	gi 118474152 ref YP_892480.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-63	Identity = 77.27%
	2	gi 157164346 ref YP_001466234.1	Campylobacter concisus 13826	E-value = 7.00E-63	Identity = 78.21%
	3	gi 154174152 ref YP_001407738.1	Campylobacter curvus 525.92	E-value = 8.00E-63	Identity = 79.35%
	4	gi 152991104 ref YP_001356826.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-61	Identity = 75.50%
	5	gi 57168522 ref ZP_00367655.1	Campylobacter coli RM2228	E-value = 4.00E-60	Identity = 75.82%
AB1858	1	gi 152991103 ref YP_001356825.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-35	Identity = 58.46%
	2	gi 152993501 ref YP_001359222.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-33	Identity = 60.00%
	3	gi 34556732 ref NP_906547.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-32	Identity = 53.91%
	4	gi 78776604 ref YP_392919.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-32	Identity = 54.62%
	5	gi 15791749 ref NP_281572.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-31	Identity = 59.54%
AB1859	1	gi 152992271 ref YP_001357992.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-84	Identity = 68.42%
	2	gi 152990265 ref YP_001355987.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-83	Identity = 66.67%
	3	gi 78777644 ref YP_393959.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-80	Identity = 65.35%
	4	gi 154174269 ref YP_001407740.1	Campylobacter curvus 525.92	E-value = 5.00E-75	Identity = 60.09%
	5	gi 153951680 ref YP_001398576.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 7.00E-74	Identity = 63.16%
AB1860	1	gi 78355492 ref YP_386941.1	Desulfovibrio desulfuricans G20	E-value = 3.00E-72	Identity = 42.66%
	2	gi 154174977 ref YP_001408723.1	Campylobacter curvus 525.92	E-value = 3.00E-70	Identity = 49.29%
	3	gi 67919809 ref ZP_00513370.1	Chlorobium limicola DSM 245	E-value = 3.00E-66	Identity = 43.15%
	4	gi 46580785 ref YP_011593.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 3.00E-61	Identity = 45.22%
	5	gi 53714511 ref YP_100503.1	Bacteroides fragilis YCH46	E-value = 4.00E-61	Identity = 42.32%
AB1861	1		*** No matches found ***		
AB1862	1	gi 67938802 ref ZP_00531321.1	Chlorobium phaeobacteroides BS1	E-value = 1.00E-09	Identity = 48.65%
	2	gi 91772791 ref YP_565483.1	Methanococcoides burtonii DSM 6242	E-value = 1.00E-09	Identity = 47.83%
	3	gi 34557762 ref NP_907577.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-09	Identity = 55.17%
	4	gi 156744177 ref YP_001434306.1	Roseiflexus castenholzii DSM 13941	E-value = 4.00E-09	Identity = 45.83%
	5	gi 149922628 ref ZP_01911056.1	Plesiocystis pacifica SIR-1	E-value = 1.00E-08	Identity = 40.30%
AB1863	1	gi 95931046 ref ZP_01313774.1	Desulfuromonas acetoxidans DSM 684	E-value = 0	Identity = 56.07%
	2	gi 146329115 ref YP_001209067.1	Dichelobacter nodosus VCS1703A	E-value = 0	Identity = 45.01%
	3	gi 116749920 ref YP_846607.1	Syntrophobacter fumaroxidans MPOB	E-value = 1.00E-137	Identity = 33.38%
	4	gi 77918492 ref YP_356307.1	Pelobacter carbinolicus DSM 2380	E-value = 1.00E-128	Identity = 34.52%
	5	gi 95928507 ref ZP_01311254.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-127	Identity = 32.42%
AB1864	1	gi 95931045 ref ZP_01313773.1	Desulfuromonas acetoxidans DSM 684	E-value = 2.00E-23	Identity = 63.64%
	2	gi 34557760 ref NP_907575.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-20	Identity = 51.61%
	3	gi 146328963 ref YP_001209064.1	Dichelobacter nodosus VCS1703A	E-value = 5.00E-18	Identity = 45.45%
	4	gi 42527558 ref NP_972656.1	Treponema denticola ATCC 35405	E-value = 5.00E-16	Identity = 48.51%
	5	gi 26990504 ref NP_745929.1	Pseudomonas putida KT2440	E-value = 7.00E-13	Identity = 38.24%
AB1865	1	gi 34557011 ref NP_906826.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-41	Identity = 56.69%
AB1866	1	gi 34557010 ref NP_906825.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 62.50%

AB1867	1	gi 34557009 ref NP_906824.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-16	Identity = 56.84%
AB1868	1	gi 150387979 ref YP_001318028.1	Alkaliphilus metalliredigens QYMF	E-value = 5.00E-172	Identity = 49.35%
	2	gi 52081840 ref YP_080631.1	Bacillus licheniformis ATCC 14580	E-value = 6.00E-172	Identity = 48.22%
	3	gi 152974343 ref YP_001373860.1	Bacillus cereus subsp. cytotoxis NVH 391-98	E-value = 5.00E-171	Identity = 47.41%
	4	gi 89893575 ref YP_517062.1	Desulfotobacterium hafniense Y51	E-value = 2.00E-170	Identity = 47.59%
	5	gi 30018782 ref NP_830413.1	Bacillus cereus ATCC 14579	E-value = 6.00E-170	Identity = 47.78%
AB1869	1	gi 34557496 ref NP_907311.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-26	Identity = 56.31%
	2	gi 118443001 ref YP_877281.1	Clostridium novyi NT	E-value = 2.00E-26	Identity = 55.24%
	3	gi 154483372 ref ZP_02025820.1	Eubacterium ventriosum ATCC 27560	E-value = 5.00E-26	Identity = 58.25%
	4	gi 146295534 ref YP_001179305.1	Caldicellulosiruptor saccharolyticus DSM 8903	E-value = 3.00E-25	Identity = 56.19%
	5	gi 114844658 ref ZP_01455100.1	Thermoanaerobacter ethanolicus X514	E-value = 3.00E-25	Identity = 56.19%
AB1870	1	gi 34557008 ref NP_906823.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 55.78%
	2	gi 154174913 ref YP_001408304.1	Campylobacter curvus 525.92	E-value = 1.00E-173	Identity = 47.28%
	3	gi 118475112 ref YP_892048.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-165	Identity = 47.31%
	4	gi 154174559 ref YP_001408303.1	Campylobacter curvus 525.92	E-value = 5.00E-154	Identity = 45.68%
	5	gi 119899284 ref YP_934497.1	Azoarcus sp. BH72	E-value = 4.00E-128	Identity = 38.83%
AB1871	1		<b>*** No matches found ***</b>		
AB1872	1	gi 78777696 ref YP_394011.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 42.36%
	2	gi 34556616 ref NP_906431.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 41.12%
	3	gi 152992069 ref YP_001357790.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 40.37%
	4	gi 152990772 ref YP_001356494.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 38.33%
	5	gi 78776998 ref YP_393313.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 37.42%
AB1873	1	gi 152992181 ref YP_001357902.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-23	Identity = 31.56%
	2	gi 152990814 ref YP_001356536.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-18	Identity = 29.77%
	3	gi 34556737 ref NP_906552.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-18	Identity = 31.71%
	4	gi 149195288 ref ZP_01872376.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-16	Identity = 35.22%
	5	gi 78777454 ref YP_393769.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-12	Identity = 30.68%
AB1874	1	gi 78778234 ref YP_394549.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-30	Identity = 28.80%
	2	gi 78777451 ref YP_393766.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-24	Identity = 27.37%
	3	gi 34558828 gb AAQ75172.1	Alvinella pompejana epibiont 7G3	E-value = 2.00E-22	Identity = 25.85%
	4	gi 152992187 ref YP_001357908.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-21	Identity = 25.13%
	5	gi 149193919 ref ZP_01871017.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-19	Identity = 25.77%
AB1875	1	gi 149911304 ref ZP_01899925.1	Moritella sp. PE36	E-value = 3.00E-13	Identity = 62.12%
	2	gi 109900034 ref YP_663289.1	Pseudoalteromonas atlantica T6c	E-value = 4.00E-13	Identity = 63.49%
	3	gi 78777701 ref YP_394016.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-13	Identity = 55.07%
	4	gi 152992263 ref YP_001357984.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-12	Identity = 59.42%
	5	gi 119944855 ref YP_942535.1	Psychromonas ingrahamii 37	E-value = 3.00E-12	Identity = 58.46%
AB1876	1		<b>*** No matches found ***</b>		
AB1877	1	gi 34557780 ref NP_907595.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-40	Identity = 42.01%
	2	gi 152993408 ref YP_001359129.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-32	Identity = 37.12%
	3	gi 78778185 ref YP_394500.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-29	Identity = 37.55%
	4	gi 118475245 ref YP_891579.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-27	Identity = 32.73%
	5	gi 152993952 ref YP_001359673.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-26	Identity = 33.48%
AB1878	1	gi 121542733 ref ZP_01674450.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 3.00E-14	Identity = 25.51%
AB1879	1		<b>*** No matches found ***</b>		
AB1880	1	gi 110803274 ref YP_697644.1	Clostridium perfringens SM101	E-value = 2.00E-11	Identity = 32.10%
	2	gi 10955835 ref NP_053154.1	Yersinia pestis	E-value = 2.00E-11	Identity = 29.11%
	3	gi 1808662 emb CAA71788.1	Pseudomonas alcaligenes	E-value = 5.00E-10	Identity = 25.56%
	4	gi 83816884 ref YP_446960.1	Salinibacter ruber DSM 13855	E-value = 1.00E-09	Identity = 25.00%

	5	gi 84180838 gb ABC54843.1	Escherichia coli	E-value = 5.00E-09	Identity = 25.58%
AB1881	1		*** No matches found ***		
AB1882	1		*** No matches found ***		
AB1883	1	<i>ahpC</i> gi 152992346 ref YP_001358067.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-91	Identity = 80.81%
	2	gi 78777972 ref YP_394287.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-90	Identity = 78.28%
	3	gi 34558282 ref NP_908097.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-88	Identity = 76.77%
	4	gi 57241472 ref ZP_00369418.1	Campylobacter lari RM2100	E-value = 5.00E-86	Identity = 76.26%
	5	gi 152990141 ref YP_001355863.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-86	Identity = 75.38%
AB1884	1	<i>trxA1</i> gi 152991292 ref YP_001357014.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-36	Identity = 65.71%
	2	gi 57168680 ref ZP_00367812.1	Campylobacter coli RM2228	E-value = 2.00E-36	Identity = 65.71%
	3	gi 57241392 ref ZP_00369338.1	Campylobacter lari RM2100	E-value = 2.00E-36	Identity = 67.62%
	4	gi 153951052 ref YP_001397405.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 3.00E-36	Identity = 64.76%
	5	gi 15791535 ref NP_281358.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-36	Identity = 64.76%
AB1885	1	gi 150391952 ref YP_001322001.1	Alkaliphilus metalliredigens QYMF	E-value = 4.00E-12	Identity = 45.65%
	2	gi 92112915 ref YP_572843.1	Chromohalobacter salexigens DSM 3043	E-value = 2.00E-10	Identity = 43.21%
	3	gi 126642945 ref YP_001085929.1	Acinetobacter baumannii ATCC 17978	E-value = 2.00E-09	Identity = 39.53%
	4	gi 50086136 ref YP_047646.1	Acinetobacter sp. ADP1	E-value = 4.00E-09	Identity = 39.02%
	5	gi 119501168 ref XP_001267341.1	Neosartorya fischeri NRRL 181	E-value = 2.00E-08	Identity = 32.63%
AB1886	1	gi 152991196 ref YP_001356918.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-08	Identity = 33.87%
AB1887	1	<i>rpoC</i> gi 152990018 ref YP_001355740.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 74.18%
	2	gi 157164541 ref YP_001466545.1	Campylobacter concisus 13826	E-value = 0	Identity = 72.65%
	3	gi 118474969 ref YP_892467.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 71.23%
	4	gi 152991728 ref YP_001357449.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 70.31%
	5	gi 157414772 ref YP_001482028.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 0	Identity = 70.62%
AB1888	1	<i>rpoB</i> gi 152990017 ref YP_001355739.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 72.21%
	2	gi 152991727 ref YP_001357448.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 72.92%
	3	gi 57237532 ref YP_178546.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 0	Identity = 72.46%
	4	gi 121613040 ref YP_001000185.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 0	Identity = 72.46%
	5	gi 157414771 ref YP_001482027.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 0	Identity = 72.53%
AB1889	1	<i>rplL</i> gi 78776553 ref YP_392868.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-25	Identity = 76.42%
	2	gi 57504728 ref ZP_00370782.1	Campylobacter coli RM2228	E-value = 6.00E-25	Identity = 76.80%
	3	gi 157165629 ref YP_001466544.1	Campylobacter concisus 13826	E-value = 6.00E-25	Identity = 72.00%
	4	gi 154174384 ref YP_001408642.1	Campylobacter curvus 525.92	E-value = 8.00E-25	Identity = 74.40%
	5	gi 32265861 ref NP_859893.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-24	Identity = 67.46%
AB1890	1	<i>rplJ</i> gi 32265862 ref NP_859894.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-40	Identity = 51.57%
	2	gi 34556890 ref NP_906705.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-38	Identity = 52.83%
	3	gi 118475150 ref YP_892470.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-38	Identity = 53.42%
	4	gi 78776552 ref YP_392867.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-38	Identity = 55.97%
	5	gi 152991725 ref YP_001357446.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-37	Identity = 49.69%
AB1891	1	<i>rplA</i> gi 152990014 ref YP_001355736.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-81	Identity = 70.13%
	2	gi 57504726 ref ZP_00370780.1	Campylobacter coli RM2228	E-value = 4.00E-79	Identity = 68.67%
	3	gi 148925854 ref ZP_01809541.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 5.00E-79	Identity = 69.10%
	4	gi 15791839 ref NP_281662.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-79	Identity = 69.10%
	5	gi 57240974 ref ZP_00368922.1	Campylobacter lari RM2100	E-value = 3.00E-78	Identity = 68.67%
AB1892	1	<i>rplK</i> gi 15791838 ref NP_281661.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-48	Identity = 73.91%
	2	gi 57242442 ref ZP_00370380.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-47	Identity = 73.19%
	3	gi 57240973 ref ZP_00368921.1	Campylobacter lari RM2100	E-value = 3.00E-47	Identity = 73.91%
	4	gi 152991723 ref YP_001357444.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-47	Identity = 70.29%
	5	gi 118474174 ref YP_892472.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-47	Identity = 74.45%

AB1893	1	<i>nusG</i>	gi 118475193 ref YP_892473.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-66	Identity = 71.59%
			gi 154175492 ref YP_001408646.1	Campylobacter curvus 525.92	E-value = 4.00E-64	Identity = 68.18%
			gi 157165039 ref YP_001466540.1	Campylobacter concisus 13826	E-value = 2.00E-62	Identity = 65.34%
			gi 57504724 ref ZP_00370778.1	Campylobacter coli RM2228	E-value = 2.00E-61	Identity = 66.67%
			gi 57240972 ref ZP_00368920.1	Campylobacter lari RM2100	E-value = 2.00E-61	Identity = 68.75%
AB1894	1	<i>secE</i>	gi 154148329 ref YP_001407186.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-06	Identity = 59.32%
			gi 148925851 ref ZP_01809538.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 8.00E-06	Identity = 61.02%
			gi 15791836 ref NP_281659.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 8.00E-06	Identity = 61.02%
			gi 57237526 ref YP_178540.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 8.00E-06	Identity = 61.02%
			gi 86151679 ref ZP_01067198.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 8.00E-06	Identity = 61.02%
AB1895	1	<i>rpmG</i>	gi 57504722 ref ZP_00370776.1	Campylobacter coli RM2228	E-value = 8.00E-10	Identity = 76.92%
			gi 153952140 ref YP_001398492.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-09	Identity = 76.92%
			gi 15791835 ref NP_281658.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 1.00E-09	Identity = 76.92%
			gi 57240991 ref ZP_00368939.1	Campylobacter lari RM2100	E-value = 1.00E-09	Identity = 76.92%
			gi 57242445 ref ZP_00370383.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-09	Identity = 75.00%
AB1896	1	<i>tufA</i>	gi 37538296 sp P42482 EFTU_WOLSU	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 79.75%
			gi 152990009 ref YP_001355731.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-180	Identity = 80.05%
			gi 118474729 ref YP_892476.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-180	Identity = 80.60%
			gi 78776546 ref YP_392861.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-180	Identity = 81.34%
			gi 154174158 ref YP_001408648.1	Campylobacter curvus 525.92	E-value = 1.00E-179	Identity = 80.10%
AB1897	1	<i>murD</i>	gi 34558322 ref NP_908137.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-113	Identity = 50.90%
			gi 78777813 ref YP_394128.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-106	Identity = 49.12%
			gi 57240799 ref ZP_00368747.1	Campylobacter lari RM2100	E-value = 7.00E-103	Identity = 48.49%
			gi 57168569 ref ZP_00367702.1	Campylobacter coli RM2228	E-value = 1.00E-102	Identity = 48.49%
			gi 154174445 ref YP_001407648.1	Campylobacter curvus 525.92	E-value = 1.00E-102	Identity = 49.10%
AB1898	1	<i>mraY</i>	gi 152990061 ref YP_001355783.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-113	Identity = 62.99%
			gi 154174657 ref YP_001407649.1	Campylobacter curvus 525.92	E-value = 2.00E-109	Identity = 59.89%
			gi 78777812 ref YP_394127.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-108	Identity = 62.71%
			gi 57240800 ref ZP_00368748.1	Campylobacter lari RM2100	E-value = 3.00E-107	Identity = 58.86%
			gi 118475561 ref YP_892502.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-105	Identity = 60.45%
AB1899	1	<i>pgm</i>	gi 152993767 ref YP_001359488.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 64.42%
			gi 34558324 ref NP_908139.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-173	Identity = 59.63%
			gi 78777811 ref YP_394126.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-173	Identity = 60.29%
			gi 32266668 ref NP_860700.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-165	Identity = 58.81%
			gi 109947594 ref YP_664822.1	Helicobacter acinonychis str. Sheeba	E-value = 3.00E-163	Identity = 59.76%
AB1900	1	<i>glnA</i>	gi 78778087 ref YP_394402.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-57	Identity = 54.15%
			gi 152991264 ref YP_001356986.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-51	Identity = 51.98%
			gi 118591239 ref ZP_01548638.1	Stappia aggregata IAM 12614	E-value = 2.00E-31	Identity = 33.59%
			gi 118594982 ref ZP_01552329.1	Methylophilales bacterium HTCC2181	E-value = 1.00E-29	Identity = 35.74%
			gi 148323160 gb EDK88410.1	Fusobacterium nucleatum subsp. polymorphum ATCC 10953	E-value = 2.00E-29	Identity = 37.05%
AB1901	1	<i>pbpA</i>	gi 34558334 ref NP_908149.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 55.28%
			gi 157165718 ref YP_001467073.1	Campylobacter concisus 13826	E-value = 0	Identity = 51.99%
			gi 118474121 ref YP_892196.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 54.30%
			gi 154173954 ref YP_001408549.1	Campylobacter curvus 525.92	E-value = 0	Identity = 51.07%
			gi 152991263 ref YP_001356985.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 51.75%
AB1902	1	<i>glnA</i>	gi 152991949 ref YP_001357670.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 77.10%
			gi 118475736 ref YP_892217.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 77.31%
			gi 78778083 ref YP_394398.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 76.89%
			gi 157165609 ref YP_001466999.1	Campylobacter concisus 13826	E-value = 0	Identity = 72.90%

	5	gi 154147867 ref YP_001407222.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 73.53%
AB1903	1	gi 152991260 ref YP_001356982.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-91	Identity = 61.03%
	2	gi 152991950 ref YP_001357671.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-87	Identity = 60.69%
	3	gi 154174464 ref YP_001408568.1	Campylobacter curvus 525.92	E-value = 2.00E-81	Identity = 56.27%
	4	gi 154148198 ref YP_001407037.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-79	Identity = 57.79%
	5	gi 78778060 ref YP_394375.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-77	Identity = 55.13%
AB1904	1	gi 118475007 ref YP_891397.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-52	Identity = 67.36%
	2	gi 78776455 ref YP_392770.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-51	Identity = 66.67%
	3	gi 157165158 ref YP_001467542.1	Campylobacter concisus 13826	E-value = 6.00E-50	Identity = 65.73%
	4	gi 152991376 ref YP_001357098.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-47	Identity = 62.76%
	5	gi 152991707 ref YP_001357428.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-45	Identity = 58.74%
AB1905	1	gi 78776454 ref YP_392769.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-20	Identity = 64.38%
	2	gi 34557565 ref NP_907380.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-19	Identity = 61.64%
	3	gi 154148751 ref YP_001405730.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-19	Identity = 60.27%
	4	gi 86149491 ref ZP_01067722.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 1.00E-17	Identity = 61.64%
	5	gi 15792830 ref NP_282653.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-17	Identity = 61.64%
AB1906	1	gi 152991705 ref YP_001357426.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-48	Identity = 49.53%
	2	gi 78776453 ref YP_392768.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-44	Identity = 49.31%
	3	gi 152991378 ref YP_001357100.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-42	Identity = 47.57%
	4	gi 34556686 ref NP_906501.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-42	Identity = 41.90%
	5	gi 154147991 ref YP_001405948.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-40	Identity = 46.58%
AB1907	1	gi 114776784 ref ZP_01451827.1	Mariiprofundus ferrooxydans PV-1	E-value = 1.00E-72	Identity = 59.13%
	2	gi 77362182 ref YP_341756.1	Pseudoalteromonas haloplanktis TAC125	E-value = 3.00E-67	Identity = 57.87%
	3	gi 78486157 ref YP_392082.1	Thiomicrospira crunogena XCL-2	E-value = 2.00E-66	Identity = 56.08%
	4	gi 78776273 ref YP_392588.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-66	Identity = 62.89%
	5	gi 51246236 ref YP_066120.1	Desulfotalea psychrophila LSv54	E-value = 3.00E-65	Identity = 58.33%
AB1908	1	gi 86151053 ref ZP_01069269.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-84	Identity = 50.91%
	2	gi 157415296 ref YP_001482552.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-84	Identity = 50.91%
	3	gi 86150455 ref ZP_01068680.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 3.00E-84	Identity = 50.91%
	4	gi 15792366 ref NP_282189.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-84	Identity = 50.91%
	5	gi 88596600 ref ZP_01099837.1	Campylobacter jejuni subsp. jejuni 84-25	E-value = 4.00E-84	Identity = 50.91%
AB1909	1	gi 154175193 ref YP_001408313.1	Campylobacter curvus 525.92	E-value = 1.00E-99	Identity = 54.81%
	2	gi 78778002 ref YP_394317.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-99	Identity = 53.13%
	3	gi 34557982 ref NP_907797.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-98	Identity = 51.36%
	4	gi 157164714 ref YP_001466833.1	Campylobacter concisus 13826	E-value = 5.00E-98	Identity = 52.48%
	5	gi 118475699 ref YP_892019.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-97	Identity = 53.33%
AB1910	1	gi 152991271 ref YP_001356993.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-134	Identity = 43.59%
	2	gi 154174173 ref YP_001408543.1	Campylobacter curvus 525.92	E-value = 1.00E-126	Identity = 43.54%
	3	gi 34557978 ref NP_907793.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-126	Identity = 43.99%
	4	gi 157164916 ref YP_001467066.1	Campylobacter concisus 13826	E-value = 4.00E-126	Identity = 44.44%
	5	gi 118475499 ref YP_891878.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-121	Identity = 43.56%
AB1911	1	gi 78777657 ref YP_393972.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-58	Identity = 68.10%
	2	gi 152990286 ref YP_001356008.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-52	Identity = 61.35%
	3	gi 152992270 ref YP_001357991.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-52	Identity = 57.89%
	4	gi 15612399 ref NP_224052.1	Helicobacter pylori J99	E-value = 2.00E-48	Identity = 59.87%
	5	gi 154148315 ref YP_001406969.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-46	Identity = 56.79%
AB1912	1	gi 78776940 ref YP_393255.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-16	Identity = 37.78%
	2	gi 152991321 ref YP_001357043.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-09	Identity = 31.93%
	3	gi 78485296 ref YP_391221.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-06	Identity = 28.48%

AB1913	1	<i>clpA</i>	gi 152990129 ref YP_001355851.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 58.13%
	2		gi 34556772 ref NP_906587.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 56.68%
	3		gi 152993642 ref YP_001359363.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 55.15%
	4		gi 82523954 emb CAI78765.1	uncultured epsilon proteobacterium	E-value = 0	Identity = 55.30%
	5		gi 78776658 ref YP_392973.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 54.82%
AB1914	1	<i>clpS</i>	gi 152990128 ref YP_001355850.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-24	Identity = 64.89%
	2		gi 82523955 emb CAI78766.1	uncultured epsilon proteobacterium	E-value = 5.00E-24	Identity = 58.59%
	3		gi 34556771 ref NP_906586.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-22	Identity = 52.08%
	4		gi 78776659 ref YP_392974.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-22	Identity = 55.56%
	5		gi 121540453 ref ZP_01672214.1	Candidatus Desulfococcus oleovorans Hxd3	E-value = 8.00E-22	Identity = 56.47%
AB1915	1	<i>bioD</i>	gi 152993644 ref YP_001359365.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-51	Identity = 52.94%
	2		gi 152990127 ref YP_001355849.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-50	Identity = 50.50%
	3		gi 82523957 emb CAI78768.1	uncultured epsilon proteobacterium	E-value = 5.00E-44	Identity = 47.64%
	4		gi 78776661 ref YP_392976.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-41	Identity = 46.60%
	5		gi 149194830 ref ZP_01871924.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-36	Identity = 47.64%
AB1916	1			<b>*** No matches found ***</b>		
AB1917	1		gi 118594803 ref ZP_01552150.1	Methylophilales bacterium HTCC2181	E-value = 2.00E-129	Identity = 59.04%
	2		gi 17981051 gb AAL50820.1 AF453714_2	Rhodococcus erythropolis	E-value = 5.00E-10	Identity = 26.01%
	3		gi 134294069 ref YP_001117805.1	Burkholderia vietnamiensis G4	E-value = 1.00E-09	Identity = 26.21%
	4		gi 118473647 ref YP_890852.1	Mycobacterium smegmatis str. MC2 155	E-value = 1.00E-08	Identity = 25.95%
	5		gi 118467078 ref YP_879629.1	Mycobacterium avium 104	E-value = 2.00E-08	Identity = 26.26%
AB1918	1			<b>*** No matches found ***</b>		
AB1919	1		gi 156740917 ref YP_001431046.1	Roseiflexus castenholzii DSM 13941	E-value = 2.00E-105	Identity = 52.86%
	2		gi 148658261 ref YP_001278466.1	Roseiflexus sp. RS-1	E-value = 1.00E-102	Identity = 52.00%
	3		gi 118047898 ref ZP_01516523.1	Chloroflexus aggregans DSM 9485	E-value = 2.00E-102	Identity = 50.85%
	4		gi 76260205 ref ZP_00767844.1	Chloroflexus aurantiacus J-10-fl	E-value = 2.00E-100	Identity = 51.14%
	5		gi 83592537 ref YP_426289.1	Rhodospirillum rubrum ATCC 11170	E-value = 1.00E-99	Identity = 51.14%
AB1920	1		gi 116327769 ref YP_797489.1	Leptospira borgpetersenii serovar Hardjo-bovis L550	E-value = 1.00E-129	Identity = 68.40%
	2		gi 24215541 ref NP_713022.1	Leptospira interrogans serovar Lai str. 56601	E-value = 6.00E-129	Identity = 67.89%
	3		gi 45657078 ref YP_001164.1	Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	E-value = 7.00E-129	Identity = 67.89%
	4		gi 118594813 ref ZP_01552160.1	Methylophilales bacterium HTCC2181	E-value = 9.00E-125	Identity = 64.11%
	5		gi 73537979 ref YP_298346.1	Ralstonia eutropha JMP134	E-value = 8.00E-120	Identity = 62.46%
AB1921	1	<i>fumA</i>	gi 67156353 ref ZP_00417946.1	Azotobacter vinelandii AvOP	E-value = 0	Identity = 64.98%
	2		gi 89093995 ref ZP_01166939.1	Oceanospirillum sp. MED92	E-value = 0	Identity = 64.44%
	3		gi 152996356 ref YP_001341191.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 64.50%
	4		gi 120554952 ref YP_959303.1	Marinobacter aquaeolei VT8	E-value = 0	Identity = 62.90%
	5		gi 15838453 ref NP_299141.1	Xylella fastidiosa 9a5c	E-value = 0	Identity = 61.74%
AB1922	1		gi 90412611 ref ZP_01220613.1	Photobacterium profundum 3TCK	E-value = 3.00E-63	Identity = 47.01%
	2		gi 152993464 ref YP_001359185.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-63	Identity = 47.54%
	3		gi 78777705 ref YP_394020.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-62	Identity = 45.59%
	4		gi 126208838 ref YP_001054063.1	Actinobacillus pleuropneumoniae L20	E-value = 3.00E-62	Identity = 45.79%
	5		gi 90577729 ref ZP_01233540.1	Vibrio angustum S14	E-value = 7.00E-62	Identity = 46.51%
AB1923	1		gi 149193826 ref ZP_01870924.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-38	Identity = 26.49%
AB1924	1	<i>arsB</i>	gi 78776514 ref YP_392829.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-139	Identity = 73.15%
	2		gi 152992971 ref YP_001358692.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-128	Identity = 66.59%
	3		gi 152989779 ref YP_001355501.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-121	Identity = 65.36%
	4		gi 34557153 ref NP_906968.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-116	Identity = 60.82%
	5		gi 118474803 ref YP_892784.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-116	Identity = 62.50%
AB1925	1	<i>arsR</i>	gi 78776516 ref YP_392831.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-35	Identity = 69.61%

	2	gi 152992970 ref YP_001358691.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-30	Identity = 62.24%
	3	gi 57241136 ref ZP_00369083.1	Campylobacter lari RM2100	E-value = 2.00E-22	Identity = 51.96%
	4	gi 152989783 ref YP_001355505.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-20	Identity = 49.02%
	5	gi 34557167 ref NP_906982.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-20	Identity = 47.42%
AB1926	1	gi 152993005 ref YP_001358726.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-17	Identity = 67.11%
	2	gi 34557156 ref NP_906971.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-17	Identity = 74.65%
	3	gi 152989781 ref YP_001355503.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-14	Identity = 62.67%
	4	gi 86157455 ref YP_464240.1	Anaeromyxobacter dehalogenans 2CP-C	E-value = 2.00E-13	Identity = 61.33%
	5	gi 110600603 ref ZP_01388820.1	Geobacter sp. FRC-32	E-value = 6.00E-13	Identity = 62.67%
AB1927	1	gi 152993006 ref YP_001358727.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-94	Identity = 62.16%
	2	gi 152989780 ref YP_001355502.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-92	Identity = 58.92%
	3	gi 118746248 ref ZP_01594197.1	Geobacter lovleyi SZ	E-value = 7.00E-80	Identity = 51.78%
	4	gi 148262521 ref YP_001229227.1	Geobacter uraniumreducens Rf4	E-value = 2.00E-78	Identity = 52.37%
	5	gi 39998046 ref NP_953997.1	Geobacter sulfurreducens PCA	E-value = 1.00E-76	Identity = 53.72%
AB1928	1	arsC gi 34557154 ref NP_906969.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-43	Identity = 63.64%
	2	gi 152992969 ref YP_001358690.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-42	Identity = 72.44%
	3	gi 152989782 ref YP_001355504.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-39	Identity = 62.20%
	4	gi 78776515 ref YP_392830.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-38	Identity = 64.29%
	5	gi 149194612 ref ZP_01871708.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-37	Identity = 61.07%
AB1929	1	gi 152991488 ref YP_001357210.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-36	Identity = 43.72%
	2	gi 149194880 ref ZP_01871974.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-30	Identity = 44.72%
	3	gi 152993061 ref YP_001358782.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-29	Identity = 37.43%
	4	gi 87119381 ref ZP_01075279.1	Marinomonas sp. MED121	E-value = 3.00E-22	Identity = 32.77%
	5	gi 32267306 ref NP_861338.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-22	Identity = 36.07%
AB1930	1	gi 152993295 ref YP_001359016.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-85	Identity = 48.81%
	2	gi 78777568 ref YP_393883.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-77	Identity = 45.80%
	3	gi 57168597 ref ZP_00367730.1	Campylobacter coli RM2228	E-value = 4.00E-75	Identity = 42.08%
	4	gi 15791825 ref NP_281648.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 6.00E-75	Identity = 42.60%
	5	gi 148925840 ref ZP_01809527.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 8.00E-75	Identity = 42.60%
AB1931	1	flhA gi 78776923 ref YP_393238.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 52.21%
	2	gi 149193762 ref ZP_01870860.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-173	Identity = 52.03%
	3	gi 154174693 ref YP_001408026.1	Campylobacter curvus 525.92	E-value = 3.00E-172	Identity = 49.72%
	4	gi 57240352 ref ZP_00368301.1	Campylobacter lari RM2100	E-value = 6.00E-171	Identity = 50.37%
	5	gi 153951195 ref YP_001398127.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 4.00E-170	Identity = 49.79%
AB1932	1	flgL	*** No matches found ***		
AB1933	1	flil gi 149194683 ref ZP_01871778.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-141	Identity = 60.28%
	2	gi 78778279 ref YP_394594.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-141	Identity = 60.19%
	3	gi 34558482 ref NP_908297.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-141	Identity = 60.71%
	4	gi 154174001 ref YP_001407433.1	Campylobacter curvus 525.92	E-value = 1.00E-135	Identity = 59.35%
	5	gi 157163914 ref YP_001465995.1	Campylobacter concisus 13826	E-value = 5.00E-135	Identity = 59.76%
AB1934	1		*** No matches found ***		
AB1935	1	flhB gi 149194192 ref ZP_01871290.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-76	Identity = 47.56%
	2	gi 86151337 ref ZP_01069552.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-75	Identity = 45.71%
	3	gi 86153620 ref ZP_01071823.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 8.00E-75	Identity = 45.43%
	4	gi 148926430 ref ZP_01810113.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 9.00E-75	Identity = 45.43%
	5	gi 15791703 ref NP_281526.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 9.00E-75	Identity = 45.43%
AB1936	1	flilR gi 57240502 ref ZP_00368451.1	Campylobacter lari RM2100	E-value = 2.00E-18	Identity = 28.23%
	2	gi 153951433 ref YP_001397725.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-17	Identity = 28.00%
	3	gi 57238051 ref YP_179300.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-17	Identity = 27.13%

	4	gi 86152607 ref ZP_01070812.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 3.00E-17	Identity = 26.72%
	5	gi 15792503 ref NP_282326.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-17	Identity = 26.72%
AB1937	1		<b>*** No matches found ***</b>		
AB1938	1	<i>flgC</i> gi 149195179 ref ZP_01872270.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-32	Identity = 46.67%
	2	gi 34557980 ref NP_907795.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-31	Identity = 42.68%
	3	gi 118474843 ref YP_891880.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-30	Identity = 45.68%
	4	gi 157165285 ref YP_001467064.1	Campylobacter concisus 13826	E-value = 2.00E-29	Identity = 42.94%
	5	gi 32266907 ref NP_860939.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-29	Identity = 42.59%
AB1939	1	<i>flhE</i> gi 153951288 ref YP_001398446.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-08	Identity = 39.39%
	2	gi 15791887 ref NP_281710.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-08	Identity = 40.40%
	3	gi 57242335 ref ZP_00370274.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-08	Identity = 40.40%
	4	gi 91202524 emb CAJ72163.1	Candidatus Kueneria stuttgartiensis	E-value = 2.00E-08	Identity = 34.74%
	5	gi 57238274 ref YP_178645.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 3.00E-08	Identity = 39.39%
AB1940	1		<b>*** No matches found ***</b>		
AB1941	1	gi 152990182 ref YP_001355904.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-33	Identity = 36.10%
	2	gi 34557957 ref NP_907772.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-32	Identity = 31.56%
	3	gi 154174453 ref YP_001408772.1	Campylobacter curvus 525.92	E-value = 2.00E-32	Identity = 31.06%
	4	gi 149194330 ref ZP_01871427.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-32	Identity = 30.80%
	5	gi 118474588 ref YP_892643.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-32	Identity = 33.33%
AB1942	1	<i>flhF</i> gi 149194329 ref ZP_01871426.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-73	Identity = 42.05%
	2	gi 78776902 ref YP_393217.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-68	Identity = 37.92%
	3	gi 118475040 ref YP_892642.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-66	Identity = 37.47%
	4	gi 15611457 ref NP_223108.1	Helicobacter pylori J99	E-value = 6.00E-55	Identity = 36.81%
	5	gi 108562837 ref YP_627153.1	Helicobacter pylori HPAG1	E-value = 2.00E-54	Identity = 36.81%
AB1943	1		<b>*** No matches found ***</b>		
AB1944	1		<b>*** No matches found ***</b>		
AB1945	1		<b>*** No matches found ***</b>		
AB1946	1	<i>flhY</i> gi 34557953 ref NP_907768.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-23	Identity = 33.18%
	2	gi 149194334 ref ZP_01871431.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-22	Identity = 32.25%
	3	gi 32266647 ref NP_860679.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-22	Identity = 35.27%
	4	gi 15611462 ref NP_223113.1	Helicobacter pylori J99	E-value = 1.00E-18	Identity = 28.78%
	5	gi 154175006 ref YP_001408768.1	Campylobacter curvus 525.92	E-value = 4.00E-18	Identity = 29.82%
AB1947	1	<i>flaG</i>	<b>*** No matches found ***</b>		
AB1948	1		<b>*** No matches found ***</b>		
AB1949	1		<b>*** No matches found ***</b>		
AB1950	1	<i>flgE1</i>	<b>*** No matches found ***</b>		
AB1951	1	<i>flgE2</i> gi 152990377 ref YP_001356099.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-17	Identity = 26.12%
AB1952	1	<i>flgD</i> gi 149195337 ref ZP_01872424.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-08	Identity = 30.49%
AB1953	1	<i>flhN</i> gi 157164107 ref YP_001466298.1	Campylobacter concisus 13826	E-value = 9.00E-12	Identity = 40.23%
	2	gi 154174584 ref YP_001408856.1	Campylobacter curvus 525.92	E-value = 9.00E-12	Identity = 41.38%
	3	gi 118475399 ref YP_891558.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-11	Identity = 43.53%
	4	gi 78777364 ref YP_393679.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-11	Identity = 42.86%
	5	gi 149194013 ref ZP_01871111.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-11	Identity = 39.53%
AB1954	1	<i>flhH</i> gi 109947512 ref YP_664740.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-06	Identity = 26.78%
AB1955	1	<i>flhG</i> gi 149194459 ref ZP_01871556.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-64	Identity = 43.75%
	2	gi 34558285 ref NP_908100.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-63	Identity = 43.26%
	3	gi 82523971 emb CAI78782.1	uncultured epsilon proteobacterium	E-value = 6.00E-63	Identity = 43.79%
	4	gi 157164732 ref YP_001466463.1	Campylobacter concisus 13826	E-value = 1.00E-61	Identity = 43.65%
	5	gi 154175354 ref YP_001408874.1	Campylobacter curvus 525.92	E-value = 1.00E-61	Identity = 43.26%



AB1956	1	<i>flif</i>	gi 149194458 ref ZP_01871555.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-64	Identity = 34.31%
	2		gi 157165014 ref YP_001466462.1	Campylobacter concisus 13826	E-value = 1.00E-59	Identity = 31.95%
	3		gi 34558286 ref NP_908101.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-57	Identity = 30.07%
	4		gi 108562771 ref YP_627087.1	Helicobacter pylori HPAG1	E-value = 5.00E-57	Identity = 30.98%
	5		gi 154174065 ref YP_001408875.1	Campylobacter curvus 525.92	E-value = 6.00E-57	Identity = 31.28%
AB1957	1	<i>flgB</i>	gi 78776566 ref YP_392881.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-13	Identity = 38.10%
	2		gi 157164065 ref YP_001467063.1	Campylobacter concisus 13826	E-value = 5.00E-13	Identity = 34.75%
	3		gi 154174839 ref YP_001408540.1	Campylobacter curvus 525.92	E-value = 9.00E-13	Identity = 38.71%
	4		gi 149195180 ref ZP_01872271.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-12	Identity = 35.29%
	5		gi 57242333 ref ZP_00370272.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-11	Identity = 34.68%
AB1958	1	<i>flgG1</i>	gi 149194279 ref ZP_01871376.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-20	Identity = 34.75%
	2		gi 153952418 ref YP_001398358.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 6.00E-20	Identity = 30.26%
	3		gi 86151576 ref ZP_01069790.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-19	Identity = 29.89%
	4		gi 121612923 ref YP_001000393.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-19	Identity = 30.00%
	5		gi 86153287 ref ZP_01071491.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-19	Identity = 29.52%
AB1960	1	<i>cheY2</i>	gi 154174704 ref YP_001407722.1	Campylobacter curvus 525.92	E-value = 8.00E-35	Identity = 66.39%
	2		gi 157164984 ref YP_001467285.1	Campylobacter concisus 13826	E-value = 7.00E-34	Identity = 66.39%
	3		gi 15792443 ref NP_282266.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-33	Identity = 65.57%
	4		gi 109947708 ref YP_664936.1	Helicobacter acinonychis str. Sheeba	E-value = 3.00E-33	Identity = 65.57%
	5		gi 15611426 ref NP_223077.1	Helicobacter pylori J99	E-value = 6.00E-33	Identity = 65.57%
AB1961	1	<i>flgG2</i>	gi 157165544 ref YP_001467096.1	Campylobacter concisus 13826	E-value = 1.00E-73	Identity = 60.15%
	2		gi 154174905 ref YP_001408076.1	Campylobacter curvus 525.92	E-value = 1.00E-72	Identity = 59.00%
	3		gi 34558104 ref NP_907919.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-71	Identity = 58.62%
	4		gi 32266580 ref NP_860612.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-70	Identity = 57.85%
	5		gi 109946869 ref YP_664097.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-69	Identity = 56.32%
AB1962	1			*** No matches found ***		
AB1963	1			*** No matches found ***		
AB1964	1	<i>rimM</i>	gi 78776654 ref YP_392969.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-38	Identity = 49.44%
	2		gi 152991966 ref YP_001357687.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-36	Identity = 44.89%
	3		gi 152991244 ref YP_001356966.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-33	Identity = 45.88%
	4		gi 157164206 ref YP_001466986.1	Campylobacter concisus 13826	E-value = 7.00E-32	Identity = 47.46%
	5		gi 153951260 ref YP_001398343.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 9.00E-32	Identity = 49.44%
AB1965	1		gi 57167723 ref ZP_00366863.1	Campylobacter coli RM2228	E-value = 1.00E-12	Identity = 50.00%
	2		gi 152991245 ref YP_001356967.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-12	Identity = 51.32%
	3		gi 34556968 ref NP_906783.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-12	Identity = 52.63%
	4		gi 152991965 ref YP_001357686.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-12	Identity = 51.32%
	5		gi 157164994 ref YP_001466987.1	Campylobacter concisus 13826	E-value = 5.00E-12	Identity = 51.32%
AB1966	1	<i>rpsP</i>	gi 15792059 ref NP_281882.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-22	Identity = 76.00%
	2		gi 152991246 ref YP_001356968.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-22	Identity = 76.00%
	3		gi 57167722 ref ZP_00366862.1	Campylobacter coli RM2228	E-value = 3.00E-22	Identity = 76.00%
	4		gi 57242692 ref ZP_00370629.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-22	Identity = 76.00%
	5		gi 152991964 ref YP_001357685.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-22	Identity = 74.67%
AB1967	1	<i>ffh</i>	gi 78776651 ref YP_392966.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-148	Identity = 64.41%
	2		gi 157165369 ref YP_001466989.1	Campylobacter concisus 13826	E-value = 1.00E-147	Identity = 63.78%
	3		gi 34556966 ref NP_906781.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-145	Identity = 61.40%
	4		gi 154174570 ref YP_001408556.1	Campylobacter curvus 525.92	E-value = 3.00E-144	Identity = 62.64%
	5		gi 86151630 ref ZP_01069844.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 3.00E-144	Identity = 62.73%
AB1968	1		gi 152991248 ref YP_001356970.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-63	Identity = 58.68%
	2		gi 78776648 ref YP_392963.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-60	Identity = 51.64%

	3	gi 118474954 ref YP_892206.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-55	Identity = 52.65%
	4	gi 152991961 ref YP_001357682.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-55	Identity = 51.85%
	5	gi 34558398 ref NP_908213.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-52	Identity = 49.80%
AB1969	1	gi 152991958 ref YP_001357679.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-107	Identity = 50.90%
	2	gi 78776647 ref YP_392962.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-93	Identity = 47.86%
	3	gi 154173747 ref YP_001408558.1	Campylobacter curvus 525.92	E-value = 1.00E-91	Identity = 48.15%
	4	gi 157164650 ref YP_001466991.1	Campylobacter concisus 13826	E-value = 2.00E-91	Identity = 47.76%
	5	gi 118475256 ref YP_892207.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-89	Identity = 47.51%
AB1970	1	gi 57167718 ref ZP_00366858.1	Campylobacter coli RM2228	E-value = 3.00E-44	Identity = 50.42%
	2	gi 57242696 ref ZP_00370633.1	Campylobacter upsaliensis RM3195	E-value = 8.00E-43	Identity = 49.37%
	3	gi 154174062 ref YP_001408559.1	Campylobacter curvus 525.92	E-value = 3.00E-42	Identity = 47.88%
	4	gi 148926671 ref ZP_01810352.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 8.00E-42	Identity = 50.42%
	5	gi 152991251 ref YP_001356973.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-42	Identity = 53.16%
AB1971	1	gi 149195328 ref ZP_01872415.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-62	Identity = 55.56%
	2	gi 57167717 ref ZP_00366857.1	Campylobacter coli RM2228	E-value = 8.00E-62	Identity = 51.02%
	3	gi 78776645 ref YP_392960.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-61	Identity = 49.38%
	4	gi 152991252 ref YP_001356974.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-60	Identity = 51.03%
	5	gi 157414992 ref YP_001482248.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-59	Identity = 52.24%
AB1972	1	gi 152991955 ref YP_001357676.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-147	Identity = 83.51%
	2	gi 78778051 ref YP_394366.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-145	Identity = 82.82%
	3	gi 152991253 ref YP_001356975.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-139	Identity = 82.27%
	4	gi 34558401 ref NP_908216.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-133	Identity = 77.13%
	5	gi 32266030 ref NP_860062.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-131	Identity = 74.57%
AB1973	1	gi 152991254 ref YP_001356976.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-15	Identity = 49.33%
	2	gi 149195324 ref ZP_01872411.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-14	Identity = 48.68%
	3	gi 152993541 ref YP_001359262.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-13	Identity = 49.33%
	4	gi 145621400 ref ZP_01777369.1	Petrogoga mobilis SJ95	E-value = 1.00E-09	Identity = 37.84%
	5	gi 108804446 ref YP_644383.1	Rubrobacter xylanophilus DSM 9941	E-value = 8.00E-08	Identity = 31.58%
AB1974	1	gi 152991256 ref YP_001356978.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-55	Identity = 75.00%
	2	gi 32266027 ref NP_860059.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-51	Identity = 67.28%
	3	gi 149195322 ref ZP_01872409.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-51	Identity = 66.46%
	4	gi 78778057 ref YP_394372.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-49	Identity = 72.56%
	5	gi 34558404 ref NP_908219.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-48	Identity = 73.17%
AB1975	1		*** No matches found ***		
AB1976	1	gi 34558405 ref NP_908220.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-164	Identity = 64.44%
	2	gi 152991258 ref YP_001356980.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-161	Identity = 66.27%
	3	gi 78778058 ref YP_394373.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-160	Identity = 66.19%
	4	gi 152991951 ref YP_001357672.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-157	Identity = 63.40%
	5	gi 109946960 ref YP_664188.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-156	Identity = 64.66%
AB1977	1	gi 95930248 ref ZP_01312986.1	Desulfuromonas acetoxidans DSM 684	E-value = 5.00E-66	Identity = 29.73%
	2	gi 95929898 ref ZP_01312639.1	Desulfuromonas acetoxidans DSM 684	E-value = 3.00E-64	Identity = 30.87%
	3	gi 15889206 ref NP_354887.1	Agrobacterium tumefaciens str. C58	E-value = 2.00E-62	Identity = 31.40%
	4	gi 116252678 ref YP_768516.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 8.00E-61	Identity = 30.52%
	5	gi 116255096 ref YP_770930.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 3.00E-52	Identity = 27.57%
AB1978	1	gi 152990520 ref YP_001356242.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-102	Identity = 50.30%
	2	gi 78777282 ref YP_393597.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-99	Identity = 47.15%
	3	gi 157163888 ref YP_001467179.1	Campylobacter concisus 13826	E-value = 3.00E-93	Identity = 47.21%
	4	gi 154147949 ref YP_001405901.1	Campylobacter hominis ATCC BAA-381	E-value = 7.00E-93	Identity = 48.23%
	5	gi 118475107 ref YP_892352.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-89	Identity = 44.79%

AB1979	1	gi 152992823 ref YP_001358544.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-82	Identity = 51.57%
	2	gi 78777283 ref YP_393598.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-82	Identity = 51.60%
	3	gi 34557940 ref NP_907755.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-77	Identity = 45.23%
	4	gi 152990519 ref YP_001356241.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-73	Identity = 49.64%
	5	gi 149194530 ref ZP_01871626.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-72	Identity = 51.10%
AB1980	1	gi 57240981 ref ZP_00368929.1	Campylobacter lari RM2100	E-value = 0	Identity = 76.67%
	2	gi 154149329 ref YP_001407177.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 75.78%
	3	gi 148925869 ref ZP_01809556.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 0	Identity = 75.78%
	4	gi 153952626 ref YP_001398475.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 0	Identity = 75.93%
	5	gi 15791857 ref NP_281680.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 0	Identity = 75.93%
AB1981	1	gi 149195225 ref ZP_01872315.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-55	Identity = 74.19%
	2	gi 78776557 ref YP_392872.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-54	Identity = 72.26%
	3	gi 57242430 ref ZP_00370368.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-54	Identity = 69.87%
	4	gi 154174218 ref YP_001408637.1	Campylobacter curvus 525.92	E-value = 1.00E-53	Identity = 70.51%
	5	gi 32265858 ref NP_859890.1	Helicobacter hepaticus ATCC 51449	E-value = 3.00E-53	Identity = 72.90%
AB1982	1	gi 57504742 ref ZP_00370796.1	Campylobacter coli RM2228	E-value = 2.00E-50	Identity = 94.40%
	2	gi 57242431 ref ZP_00370369.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-50	Identity = 92.13%
	3	gi 57240979 ref ZP_00368927.1	Campylobacter lari RM2100	E-value = 3.00E-50	Identity = 92.91%
	4	gi 118474757 ref YP_892465.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-50	Identity = 93.70%
	5	gi 15791855 ref NP_281678.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 5.00E-50	Identity = 93.60%
AB1983	1	gi 114327835 ref YP_744992.1	Granulibacter thesedensis CGDNIH1	E-value = 6.00E-24	Identity = 30.71%
	2	gi 124870207 gb EAY61923.1	Burkholderia cenocepacia PC184	E-value = 1.00E-23	Identity = 27.20%
	3	gi 134293411 ref YP_001117147.1	Burkholderia vietnamiensis G4	E-value = 2.00E-22	Identity = 25.60%
	4	gi 78062301 ref YP_372209.1	Burkholderia sp. 383	E-value = 4.00E-21	Identity = 26.00%
	5	gi 157370545 ref YP_001478534.1	Serratia proteamaculans 568	E-value = 3.00E-19	Identity = 26.27%
AB1984	1	gi 146297951 ref YP_001192542.1	Flavobacterium johnsoniae UW101	E-value = 2.00E-100	Identity = 55.00%
	2	gi 149277701 ref ZP_01883841.1	Pedobacter sp. BAL39	E-value = 3.00E-92	Identity = 52.45%
	3	gi 86140318 ref ZP_01058877.1	Flavobacterium sp. MED217	E-value = 3.00E-86	Identity = 49.19%
	4	gi 120435108 ref YP_860794.1	Gramella forsetii KT0803	E-value = 8.00E-82	Identity = 48.52%
	5	gi 29348522 ref NP_812025.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 3.00E-78	Identity = 44.74%
AB1985	1	gi 78777203 ref YP_393518.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-123	Identity = 39.09%
	2	gi 34557301 ref NP_907116.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-112	Identity = 37.77%
	3	gi 34557772 ref NP_907587.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-79	Identity = 30.72%
	4	gi 78187396 ref YP_375439.1	Pelodictyon luteolum DSM 273	E-value = 2.00E-56	Identity = 29.55%
	5	gi 68552057 ref ZP_00591450.1	Prosthecochloris aestuarii DSM 271	E-value = 3.00E-56	Identity = 29.42%
AB1986	1	gi 78777544 ref YP_393859.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-104	Identity = 62.58%
	2	gi 34557300 ref NP_907115.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-93	Identity = 52.20%
	3	gi 152991332 ref YP_001357054.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-89	Identity = 53.92%
	4	gi 56476605 ref YP_158194.1	Azoarcus sp. EbN1	E-value = 6.00E-87	Identity = 49.67%
	5	gi 30249182 ref NP_841252.1	Nitrosomonas europaea ATCC 19718	E-value = 2.00E-84	Identity = 47.40%
AB1987	1	gi 78777547 ref YP_393862.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-98	Identity = 49.88%
	2	gi 152991335 ref YP_001357057.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-84	Identity = 46.19%
	3	gi 34557296 ref NP_907111.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-60	Identity = 41.38%
	4	gi 30249179 ref NP_841249.1	Nitrosomonas europaea ATCC 19718	E-value = 3.00E-25	Identity = 29.12%
	5	gi 56476602 ref YP_158191.1	Azoarcus sp. EbN1	E-value = 2.00E-23	Identity = 27.68%
AB1988	1	gi 152991334 ref YP_001357056.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-82	Identity = 67.21%
	2	gi 78777546 ref YP_393861.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-81	Identity = 67.48%
	3	gi 34557297 ref NP_907112.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-64	Identity = 51.63%
	4	gi 30249180 ref NP_841250.1	Nitrosomonas europaea ATCC 19718	E-value = 9.00E-64	Identity = 53.68%

	5	gi 56476603 ref YP_158192.1	Azoarcus sp. EbN1	E-value = 4.00E-57	Identity = 47.08%
AB1989	1	gi 78777545 ref YP_393860.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-96	Identity = 73.08%
	2	gi 152991333 ref YP_001357055.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-87	Identity = 65.00%
	3	gi 34557298 ref NP_907113.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-82	Identity = 64.62%
	4	gi 56476604 ref YP_158193.1	Azoarcus sp. EbN1	E-value = 6.00E-74	Identity = 59.84%
	5	gi 30249181 ref NP_841251.1	Nitrosomonas europaea ATCC 19718	E-value = 1.00E-66	Identity = 55.56%
AB1990	1	gi 154148250 ref YP_001406400.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-12	Identity = 26.42%
	2	gi 152993495 ref YP_001359216.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-12	Identity = 28.84%
	3	gi 154174416 ref YP_001408602.1	Campylobacter curvus 525.92	E-value = 4.00E-12	Identity = 26.55%
	4	gi 78776771 ref YP_393086.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-10	Identity = 30.23%
	5	gi 34558779 gb AAQ75124.1	Alvinella pompejana epibiont 6C6	E-value = 3.00E-09	Identity = 25.00%
AB1991	1	gi 157165779 ref YP_001466577.1	Campylobacter concisus 13826	E-value = 1.00E-64	Identity = 43.06%
	2	gi 154173952 ref YP_001408603.1	Campylobacter curvus 525.92	E-value = 3.00E-63	Identity = 41.62%
	3	gi 154148550 ref YP_001406399.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-59	Identity = 40.37%
	4	gi 57240966 ref ZP_00368914.1	Campylobacter lari RM2100	E-value = 1.00E-59	Identity = 42.49%
	5	gi 118474965 ref YP_891769.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-59	Identity = 42.08%
AB1992	1	<i>trpG</i> gi 152990399 ref YP_001356121.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-78	Identity = 74.60%
	2	gi 78776767 ref YP_393082.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-77	Identity = 75.13%
	3	gi 152992135 ref YP_001357856.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-76	Identity = 70.37%
	4	gi 34558448 ref NP_908263.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-72	Identity = 69.15%
	5	gi 149195268 ref ZP_01872357.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-69	Identity = 69.31%
AB1993	1	<i>fbpA</i> gi 134299387 ref YP_001112883.1	Desulfotomaculum reducens MI-1	E-value = 3.00E-87	Identity = 53.50%
	2	gi 149180748 ref ZP_01859251.1	Bacillus sp. SG-1	E-value = 5.00E-85	Identity = 50.47%
	3	gi 91217373 ref ZP_01254333.1	Psychroflexus torquis ATCC 700755	E-value = 2.00E-84	Identity = 50.16%
	4	gi 86606749 ref YP_475512.1	Synechococcus sp. JA-3-3Ab	E-value = 1.00E-82	Identity = 46.71%
	5	gi 86610096 ref YP_478858.1	Synechococcus sp. JA-2-3B'a(2-13)	E-value = 6.00E-82	Identity = 45.35%
AB1994	1	<i>fbpB</i> gi 152997754 ref YP_001342589.1	Marinomonas sp. MWYL1	E-value = 3.00E-71	Identity = 32.62%
	2	gi 118474264 ref YP_891326.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-71	Identity = 36.63%
	3	gi 89095388 ref ZP_01168303.1	Oceanospirillum sp. MED92	E-value = 5.00E-71	Identity = 33.78%
	4	gi 22299255 ref NP_682502.1	Thermosynechococcus elongatus BP-1	E-value = 7.00E-69	Identity = 32.70%
	5	gi 85713063 ref ZP_01044099.1	Idiomarina baltica OS145	E-value = 8.00E-69	Identity = 31.53%
AB1996	1	gi 22299035 ref NP_682282.1	Thermosynechococcus elongatus BP-1	E-value = 1.00E-58	Identity = 40.39%
	2	gi 4514346 dbj BAA75384.1	Bacillus halodurans	E-value = 1.00E-57	Identity = 38.76%
	3	gi 15613075 ref NP_241378.1	Bacillus halodurans C-125	E-value = 1.00E-57	Identity = 38.76%
	4	gi 42780882 ref NP_978129.1	Bacillus cereus ATCC 10987	E-value = 5.00E-57	Identity = 37.97%
	5	gi 16330805 ref NP_441533.1	Synechocystis sp. PCC 6803	E-value = 6.00E-57	Identity = 36.34%
AB1997	1	gi 34556724 ref NP_906539.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-77	Identity = 47.38%
	2	gi 17229700 ref NP_486248.1	Nostoc sp. PCC 7120	E-value = 4.00E-13	Identity = 25.74%
	3	gi 146298703 ref YP_001193294.1	Flavobacterium johnsoniae UW101	E-value = 9.00E-08	Identity = 27.24%
AB1998	1	gi 34556725 ref NP_906540.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 53.60%
	2	gi 17229677 ref NP_486225.1	Nostoc sp. PCC 7120	E-value = 1.00E-83	Identity = 30.72%
	3	gi 37519930 ref NP_923307.1	Gloeobacter violaceus PCC 7421	E-value = 2.00E-77	Identity = 27.88%
	4	gi 16329191 ref NP_439919.1	Synechocystis sp. PCC 6803	E-value = 5.00E-76	Identity = 30.90%
	5	gi 126658812 ref ZP_01729956.1	Cyanothece sp. CCY0110	E-value = 2.00E-69	Identity = 27.34%
AB1999	1	gi 34557009 ref NP_906824.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-12	Identity = 51.14%
AB2000	1	gi 34557010 ref NP_906825.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-127	Identity = 44.36%
	2	gi 118071667 ref ZP_01539861.1	Shewanella woodyi ATCC 51908	E-value = 1.00E-06	Identity = 25.80%
AB2001	1	gi 34557011 ref NP_906826.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-24	Identity = 42.07%
	2	gi 42527566 ref NP_972664.1	Treponema denticola ATCC 35405	E-value = 2.00E-15	Identity = 34.34%

AB2002	1	<i>nirA</i>	gi 78776360 ref YP_392675.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-119	Identity = 42.47%
	2		gi 11220484 ref YP_711278.1	Frankia alni ACN14a	E-value = 1.00E-90	Identity = 37.38%
	3		gi 86739238 ref YP_479638.1	Frankia sp. Ccl3	E-value = 4.00E-88	Identity = 36.17%
	4		gi 29828669 ref NP_823303.1	Streptomyces avermitilis MA-4680	E-value = 6.00E-88	Identity = 36.23%
	5		gi 68232797 ref ZP_00571935.1	Frankia sp. EAN1pec	E-value = 7.00E-88	Identity = 35.42%
AB2003	1		gi 78777886 ref YP_394201.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-114	Identity = 56.85%
	2		gi 152994429 ref YP_001339264.1	Marinomonas sp. MWYL1	E-value = 2.00E-112	Identity = 57.10%
	3		gi 90022558 ref YP_528385.1	Saccharophagus degradans 2-40	E-value = 2.00E-111	Identity = 55.72%
	4		gi 78484621 ref YP_390546.1	Thiomicrospira crunogena XCL-2	E-value = 8.00E-110	Identity = 55.94%
	5		gi 109896554 ref YP_659809.1	Pseudoalteromonas atlantica T6c	E-value = 5.00E-108	Identity = 53.96%
AB2004	1			<b>*** No matches found ***</b>		
AB2005	1		gi 126734957 ref ZP_01750703.1	Roseobacter sp. CCS2	E-value = 2.00E-12	Identity = 31.50%
	2		gi 116623373 ref YP_825529.1	Solibacter usitatus Ellin6076	E-value = 1.00E-11	Identity = 28.46%
	3		gi 148658298 ref YP_001278503.1	Roseiflexus sp. RS-1	E-value = 5.00E-11	Identity = 25.78%
	4		gi 94971000 ref YP_593048.1	Acidobacteria bacterium Ellin345	E-value = 1.00E-10	Identity = 29.01%
	5		gi 156740461 ref YP_001430590.1	Roseiflexus castenholzii DSM 13941	E-value = 1.00E-10	Identity = 25.56%
AB2006	1		gi 152992317 ref YP_001358038.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 53.65%
	2		gi 78776336 ref YP_392651.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 56.16%
	3		gi 76797414 ref ZP_00779734.1	Thermoanaerobacter ethanolicus ATCC 33223	E-value = 2.00E-163	Identity = 46.38%
	4		gi 125974456 ref YP_001038366.1	Clostridium thermocellum ATCC 27405	E-value = 2.00E-160	Identity = 44.62%
	5		gi 106893073 ref ZP_01360199.1	Clostridium sp. OhILAs	E-value = 2.00E-156	Identity = 46.64%
AB2007	1		gi 78776523 ref YP_392838.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-25	Identity = 53.45%
AB2008	1		gi 27363650 ref NP_759178.1	Vibrio vulnificus CMCP6	E-value = 4.00E-35	Identity = 57.94%
	2		gi 118072364 ref ZP_01540554.1	Shewanella woodyi ATCC 51908	E-value = 9.00E-35	Identity = 60.00%
	3		gi 117619955 ref YP_858453.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 1.00E-34	Identity = 62.10%
	4		gi 106885988 ref ZP_01353338.1	Clostridium phytofermentans ISDg	E-value = 2.00E-34	Identity = 63.93%
	5		gi 90409711 ref ZP_01217728.1	Photobacterium profundum 3TCK	E-value = 3.00E-34	Identity = 58.40%
AB2009	1		gi 87121405 ref ZP_01077294.1	Marinomonas sp. MED121	E-value = 3.00E-36	Identity = 34.30%
	2		gi 84394198 ref ZP_00992928.1	Vibrio splendidus 12B01	E-value = 3.00E-35	Identity = 34.16%
	3		gi 148976266 ref ZP_01812990.1	Vibrionales bacterium SWAT-3	E-value = 3.00E-35	Identity = 34.16%
	4		gi 86144986 ref ZP_01063318.1	Vibrio sp. MED222	E-value = 6.00E-35	Identity = 33.74%
	5		gi 71736796 ref YP_274967.1	Pseudomonas syringae pv. phaseolicola 1448A	E-value = 8.00E-34	Identity = 34.08%
AB2010	1		gi 78776820 ref YP_393135.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-91	Identity = 58.22%
	2		gi 34557184 ref NP_906999.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-74	Identity = 46.13%
	3		gi 59714034 ref YP_206809.1	Vibrio fischeri ES114	E-value = 4.00E-45	Identity = 34.52%
	4		gi 116187268 ref ZP_01477157.1	Vibrio sp. Ex25	E-value = 4.00E-45	Identity = 34.97%
	5		gi 28900255 ref NP_799910.1	Vibrio parahaemolyticus RIMD 2210633	E-value = 6.00E-45	Identity = 34.62%
AB2011	1		gi 34557183 ref NP_906998.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-84	Identity = 43.21%
	2		gi 52632015 gb AAU85415.1	uncultured archaeon GZfos12E1	E-value = 3.00E-67	Identity = 39.73%
	3		gi 126652114 ref ZP_01724296.1	Bacillus sp. B14905	E-value = 1.00E-66	Identity = 39.37%
	4		gi 51245462 ref YP_065346.1	Desulfotalea psychrophila LSv54	E-value = 3.00E-66	Identity = 39.62%
	5		gi 145622093 ref ZP_01778055.1	Petrotoga mobilis SJ95	E-value = 2.00E-64	Identity = 39.84%
AB2012	1			<b>*** No matches found ***</b>		
AB2013	1		gi 34556727 ref NP_906542.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-59	Identity = 66.84%
	2		gi 74318099 ref YP_315839.1	Thiobacillus denitrificans ATCC 25259	E-value = 1.00E-58	Identity = 65.83%
	3		gi 152993739 ref YP_001359460.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-55	Identity = 59.30%
	4		gi 118474566 ref YP_891995.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-54	Identity = 61.19%
	5		gi 78778000 ref YP_394315.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-51	Identity = 57.00%
AB2014	1	<i>rplS</i>	gi 32266434 ref NP_860466.1	Helicobacter hepaticus ATCC 51449	E-value = 9.00E-33	Identity = 66.95%

	2	gi 15612139 ref NP_223791.1	Helicobacter pylori J99	E-value = 3.00E-32	Identity = 64.96%
	3	gi 34556971 ref NP_906786.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-32	Identity = 65.25%
	4	gi 15645761 ref NP_207938.1	Helicobacter pylori 26695	E-value = 4.00E-32	Identity = 64.96%
	5	gi 109947824 ref YP_665052.1	Helicobacter acinonychis str. Sheeba	E-value = 7.00E-32	Identity = 65.81%
AB2015	1	<i>trmD</i> gi 152991967 ref YP_001357688.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-81	Identity = 65.49%
	2	gi 78776655 ref YP_392970.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-80	Identity = 67.27%
	3	gi 157164613 ref YP_001466985.1	Campylobacter concisus 13826	E-value = 3.00E-73	Identity = 60.81%
	4	gi 154174128 ref YP_001408553.1	Campylobacter curvus 525.92	E-value = 7.00E-73	Identity = 61.26%
	5	gi 118475610 ref YP_892199.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-69	Identity = 57.21%
AB2016	1		<b>*** No matches found ***</b>		
AB2017	1	<i>metE</i> gi 152992121 ref YP_001357842.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 65.56%
	2	gi 78777097 ref YP_393412.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 65.96%
	3	gi 154174273 ref YP_001407376.1	Campylobacter curvus 525.92	E-value = 0	Identity = 65.52%
	4	gi 118474569 ref YP_892052.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 63.93%
	5	gi 134299605 ref YP_001113101.1	Desulfotomaculum reducens MI-1	E-value = 0	Identity = 58.43%
AB2018	1	<i>ilvA</i> gi 152993410 ref YP_001359131.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-128	Identity = 59.60%
	2	gi 149193905 ref ZP_01871003.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-126	Identity = 60.15%
	3	gi 57167828 ref ZP_00366968.1	Campylobacter coli RM2228	E-value = 4.00E-120	Identity = 58.35%
	4	gi 78777341 ref YP_393656.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-120	Identity = 56.17%
	5	gi 118474294 ref YP_891918.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-118	Identity = 58.10%
AB2019	1	<i>atpB</i> gi 152993168 ref YP_001358889.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-64	Identity = 59.47%
	2	gi 34556754 ref NP_906569.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-62	Identity = 59.01%
	3	gi 152990600 ref YP_001356322.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-62	Identity = 57.52%
	4	gi 118475487 ref YP_891946.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-60	Identity = 59.62%
	5	gi 154175380 ref YP_001408364.1	Campylobacter curvus 525.92	E-value = 9.00E-60	Identity = 60.19%
AB2020	1	gi 78777436 ref YP_393751.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-40	Identity = 50.54%
	2	gi 152990601 ref YP_001356323.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-28	Identity = 40.33%
	3	gi 34556756 ref NP_906571.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-27	Identity = 37.84%
	4	gi 118474768 ref YP_891948.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-18	Identity = 37.30%
	5	gi 149194901 ref ZP_01871995.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-13	Identity = 38.38%
AB2021	1	<i>porA</i> gi 34558087 ref NP_907902.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-15	Identity = 30.08%
	2	gi 154174725 ref YP_001408057.1	Campylobacter curvus 525.92	E-value = 3.00E-09	Identity = 25.61%
	3	gi 149195106 ref ZP_01872198.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-06	Identity = 26.20%
AB2022	1	<i>folB</i> gi 78776864 ref YP_393179.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-15	Identity = 53.85%
	2	gi 152993561 ref YP_001359282.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-10	Identity = 44.66%
	3	gi 34556464 ref NP_906279.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-09	Identity = 37.86%
	4	gi 57242731 ref ZP_00370668.1	Campylobacter upsaliensis RM3195	E-value = 4.00E-08	Identity = 42.71%
	5	gi 109946706 ref YP_663934.1	Helicobacter acinonychis str. Sheeba	E-value = 1.00E-07	Identity = 42.16%
AB2023	1	gi 78776865 ref YP_393180.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-56	Identity = 61.35%
	2	gi 152990162 ref YP_001355884.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-53	Identity = 59.90%
	3	gi 57240710 ref ZP_00368658.1	Campylobacter lari RM2100	E-value = 8.00E-50	Identity = 57.43%
	4	gi 57242730 ref ZP_00370667.1	Campylobacter upsaliensis RM3195	E-value = 5.00E-49	Identity = 56.93%
	5	gi 157164453 ref YP_001466305.1	Campylobacter concisus 13826	E-value = 4.00E-48	Identity = 57.43%
AB2024	1	<i>nadA</i> gi 78776866 ref YP_393181.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-134	Identity = 71.60%
	2	gi 152993559 ref YP_001359280.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-128	Identity = 68.18%
	3	gi 152990163 ref YP_001355885.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-127	Identity = 66.77%
	4	gi 34557638 ref NP_907453.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-121	Identity = 64.35%
	5	gi 32267338 ref NP_861370.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-105	Identity = 56.25%
AB2025	1	<i>nadC</i> gi 78776867 ref YP_393182.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-86	Identity = 58.15%

	2	gi 152993558 ref YP_001359279.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-81	Identity = 55.02%
	3	gi 152990164 ref YP_001355886.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-73	Identity = 52.19%
	4	gi 149194891 ref ZP_01871985.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-71	Identity = 54.28%
	5	gi 32267332 ref NP_861364.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-70	Identity = 49.82%
AB2026	1	gi 152990165 ref YP_001355887.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-54	Identity = 40.58%
	2	gi 152993557 ref YP_001359278.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-51	Identity = 39.29%
	3	gi 149194191 ref ZP_01871289.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-50	Identity = 38.61%
	4	gi 94263054 ref ZP_01286873.1	delta proteobacterium MLMS-1	E-value = 3.00E-43	Identity = 35.81%
	5	gi 15606737 ref NP_214117.1	Aquifex aeolicus VF5	E-value = 8.00E-38	Identity = 34.98%
AB2027	1	gi 149194190 ref ZP_01871288.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-85	Identity = 42.73%
	2	gi 152990166 ref YP_001355888.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-84	Identity = 36.64%
	3	gi 78776870 ref YP_393185.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-80	Identity = 38.78%
	4	gi 118475260 ref YP_892633.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-79	Identity = 38.02%
	5	gi 154174642 ref YP_001408788.1	Campylobacter curvus 525.92	E-value = 7.00E-78	Identity = 35.85%
AB2028	1	<i>lpxC</i> gi 152990167 ref YP_001355889.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-103	Identity = 62.75%
	2	gi 149194188 ref ZP_01871286.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-97	Identity = 64.08%
	3	gi 78776871 ref YP_393186.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-96	Identity = 63.30%
	4	gi 32266514 ref NP_860546.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-95	Identity = 62.54%
	5	gi 34558300 ref NP_908115.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-93	Identity = 62.54%
AB2029	1	gi 152990168 ref YP_001355890.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-28	Identity = 41.33%
	2	gi 78776872 ref YP_393187.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-27	Identity = 44.97%
	3	gi 149194187 ref ZP_01871285.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-26	Identity = 50.67%
	4	gi 152993553 ref YP_001359274.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-23	Identity = 39.86%
	5	gi 57240752 ref ZP_00368700.1	Campylobacter lari RM2100	E-value = 3.00E-19	Identity = 40.58%
AB2030	1	<i>thrB</i> gi 152993552 ref YP_001359273.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-98	Identity = 60.55%
	2	gi 78776873 ref YP_393188.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-93	Identity = 61.64%
	3	gi 34558302 ref NP_908117.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-93	Identity = 57.44%
	4	gi 152990169 ref YP_001355891.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-90	Identity = 63.70%
	5	gi 57168695 ref ZP_00367827.1	Campylobacter coli RM2228	E-value = 6.00E-87	Identity = 56.01%
AB2031	1		<b>*** No matches found ***</b>		
AB2032	1	<i>infB</i> gi 152993550 ref YP_001359271.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 51.52%
	2	gi 78776875 ref YP_393190.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 50.72%
	3	gi 152990170 ref YP_001355892.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 52.30%
	4	gi 157164914 ref YP_001466377.1	Campylobacter concisus 13826	E-value = 0	Identity = 48.53%
	5	gi 154174465 ref YP_001408785.1	Campylobacter curvus 525.92	E-value = 0	Identity = 46.88%
AB2033	1	<i>rbfA</i> gi 34558304 ref NP_908119.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-21	Identity = 45.69%
	2	gi 154173886 ref YP_001408784.1	Campylobacter curvus 525.92	E-value = 5.00E-20	Identity = 43.64%
	3	gi 153951532 ref YP_001397396.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-19	Identity = 45.87%
	4	gi 121612306 ref YP_999861.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 2.00E-19	Identity = 45.87%
	5	gi 15791525 ref NP_281348.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-19	Identity = 45.87%
AB2034	1	gi 152993548 ref YP_001359269.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-33	Identity = 55.63%
	2	gi 152990172 ref YP_001355894.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-31	Identity = 51.41%
	3	gi 157164808 ref YP_001466379.1	Campylobacter concisus 13826	E-value = 2.00E-26	Identity = 51.52%
	4	gi 154174423 ref YP_001408783.1	Campylobacter curvus 525.92	E-value = 5.00E-25	Identity = 47.73%
	5	gi 34558305 ref NP_908120.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-25	Identity = 43.97%
AB2035	1	<i>ribD</i> gi 149194180 ref ZP_01871278.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-85	Identity = 54.74%
	2	gi 152990173 ref YP_001355895.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-84	Identity = 44.34%
	3	gi 78776878 ref YP_393193.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-84	Identity = 47.92%
	4	gi 152993547 ref YP_001359268.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-75	Identity = 43.98%

	5	gi 148925766 ref ZP_01809454.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-73	Identity = 46.15%
AB2036	1	efp gi 32265607 ref NP_859639.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-74	Identity = 74.87%
	2	gi 154175266 ref YP_001407861.1	Campylobacter curvus 525.92	E-value = 4.00E-73	Identity = 72.83%
	3	gi 157164695 ref YP_001466442.1	Campylobacter concisus 13826	E-value = 1.00E-72	Identity = 73.33%
	4	gi 34557643 ref NP_907458.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-69	Identity = 67.38%
	5	gi 118474233 ref YP_892403.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-69	Identity = 71.82%
AB2037	1	serA gi 152990413 ref YP_001356135.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 65.09%
	2	gi 34558837 gb AAQ75181.1	Alvinella pompejana epibiont 7G3	E-value = 0	Identity = 62.19%
	3	gi 152992147 ref YP_001357868.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 64.08%
	4	gi 34557674 ref NP_907489.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 62.33%
	5	gi 157165087 ref YP_001466441.1	Campylobacter concisus 13826	E-value = 0	Identity = 61.64%
AB2038	1	rpsA gi 34557672 ref NP_907487.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-154	Identity = 55.70%
	2	gi 157164057 ref YP_001466439.1	Campylobacter concisus 13826	E-value = 5.00E-150	Identity = 56.33%
	3	gi 118475172 ref YP_892406.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-148	Identity = 56.39%
	4	gi 154175267 ref YP_001407858.1	Campylobacter curvus 525.92	E-value = 7.00E-148	Identity = 57.17%
	5	gi 154147885 ref YP_001406069.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-144	Identity = 54.81%
AB2039	1	ispH gi 34558835 gb AAQ75179.1	Alvinella pompejana epibiont 7G3	E-value = 3.00E-101	Identity = 67.51%
	2	gi 152992144 ref YP_001357865.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-100	Identity = 66.43%
	3	gi 152990411 ref YP_001356133.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-93	Identity = 64.26%
	4	gi 157164476 ref YP_001466438.1	Campylobacter concisus 13826	E-value = 3.00E-89	Identity = 61.01%
	5	gi 154173692 ref YP_001407857.1	Campylobacter curvus 525.92	E-value = 1.00E-86	Identity = 59.27%
AB2040	1	aroA gi 34558834 gb AAQ75178.1	Alvinella pompejana epibiont 7G3	E-value = 5.00E-144	Identity = 62.09%
	2	gi 152990410 ref YP_001356132.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-141	Identity = 63.37%
	3	gi 78777069 ref YP_393384.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-130	Identity = 60.53%
	4	gi 34557670 ref NP_907485.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-128	Identity = 59.25%
	5	gi 154174161 ref YP_001407856.1	Campylobacter curvus 525.92	E-value = 2.00E-128	Identity = 57.93%
AB2041	1	pheT gi 152992143 ref YP_001357864.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-177	Identity = 44.03%
	2	gi 78777068 ref YP_393383.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-171	Identity = 43.85%
	3	gi 34558833 gb AAQ75177.1	Alvinella pompejana epibiont 7G3	E-value = 1.00E-170	Identity = 44.29%
	4	gi 152990409 ref YP_001356131.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-167	Identity = 42.97%
	5	gi 34557669 ref NP_907484.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-162	Identity = 42.95%
AB2042	1	pheS gi 152992142 ref YP_001357863.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-134	Identity = 70.68%
	2	gi 118475664 ref YP_892410.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-133	Identity = 67.27%
	3	gi 154174528 ref YP_001407854.1	Campylobacter curvus 525.92	E-value = 3.00E-132	Identity = 66.97%
	4	gi 78777067 ref YP_393382.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-130	Identity = 66.06%
	5	gi 157165614 ref YP_001466437.1	Campylobacter concisus 13826	E-value = 1.00E-128	Identity = 67.07%
AB2043	1	gi 34558830 gb AAQ75174.1	Alvinella pompejana epibiont 7G3	E-value = 2.00E-33	Identity = 63.55%
	2	gi 152992141 ref YP_001357862.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-31	Identity = 64.36%
	3	gi 152990407 ref YP_001356129.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-31	Identity = 57.02%
	4	gi 118474817 ref YP_892411.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-29	Identity = 58.00%
	5	gi 78777066 ref YP_393381.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-28	Identity = 57.84%
AB2044	1	accA gi 152990065 ref YP_001355787.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-124	Identity = 71.06%
	2	gi 78777805 ref YP_394120.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-120	Identity = 66.56%
	3	gi 32266225 ref NP_860257.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-117	Identity = 68.06%
	4	gi 157165124 ref YP_001467393.1	Campylobacter concisus 13826	E-value = 5.00E-117	Identity = 66.99%
	5	gi 34557044 ref NP_906859.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-116	Identity = 66.56%
AB2045	1	fabF gi 152993741 ref YP_001359462.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-151	Identity = 67.39%
	2	gi 152990064 ref YP_001355786.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-151	Identity = 68.42%
	3	gi 78777806 ref YP_394121.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-149	Identity = 68.03%



	4	gi 157414737 ref YP_001481993.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 1.00E-146	Identity = 64.90%
	5	gi 57237499 ref YP_178513.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 2.00E-146	Identity = 64.90%
AB2046	1	acpP gi 78777807 ref YP_394122.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-15	Identity = 79.73%
	2	gi 34557046 ref NP_906861.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-14	Identity = 76.00%
	3	gi 152993742 ref YP_001359463.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-13	Identity = 82.43%
	4	gi 113954189 ref YP_729369.1	Synechococcus sp. CC9311	E-value = 3.00E-13	Identity = 65.75%
	5	gi 109947341 ref YP_664569.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-12	Identity = 65.33%
AB2047	1	fabG gi 157164484 ref YP_001467396.1	Campylobacter concisus 13826	E-value = 9.00E-93	Identity = 72.87%
	2	gi 57242189 ref ZP_00370128.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-92	Identity = 69.64%
	3	gi 154149516 ref YP_001405837.1	Campylobacter hominis ATCC BAA-381	E-value = 9.00E-92	Identity = 71.66%
	4	gi 152990062 ref YP_001355784.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-91	Identity = 74.49%
	5	gi 57240802 ref ZP_00368750.1	Campylobacter lari RM2100	E-value = 2.00E-91	Identity = 73.68%
AB2048	1	gi 152991808 ref YP_001357529.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-46	Identity = 40.49%
	2	gi 152991323 ref YP_001357045.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-45	Identity = 41.46%
	3	gi 15611935 ref NP_223586.1	Helicobacter pylori J99	E-value = 2.00E-41	Identity = 41.06%
	4	gi 108563339 ref YP_627655.1	Helicobacter pylori HPAG1	E-value = 4.00E-41	Identity = 40.24%
	5	gi 57241379 ref ZP_00369325.1	Campylobacter lari RM2100	E-value = 5.00E-41	Identity = 45.14%
AB2049	1	gi 34557974 ref NP_907789.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-59	Identity = 61.02%
	2	gi 15605809 ref NP_213186.1	Aquifex aeolicus VF5	E-value = 6.00E-13	Identity = 32.79%
	3	gi 156719953 ref ZP_02061549.1	Hydrogenobaculum sp. Y04AAS1	E-value = 5.00E-12	Identity = 35.56%
	4	gi 83593166 ref YP_426918.1	Rhodospirillum rubrum ATCC 11170	E-value = 3.00E-06	Identity = 28.02%
AB2050	1	exsB gi 152992854 ref YP_001358575.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-86	Identity = 70.00%
	2	gi 149194505 ref ZP_01871601.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-86	Identity = 68.64%
	3	gi 152990536 ref YP_001356258.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-82	Identity = 67.89%
	4	gi 78777268 ref YP_393583.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-82	Identity = 66.52%
	5	gi 154174066 ref YP_001407913.1	Campylobacter curvus 525.92	E-value = 1.00E-76	Identity = 62.84%
AB2051	1	gi 34558435 ref NP_908250.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-08	Identity = 29.57%
AB2052	1	gi 152991814 ref YP_001357535.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-50	Identity = 46.22%
	2	gi 152991316 ref YP_001357038.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-48	Identity = 46.19%
	3	gi 78778105 ref YP_394420.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-43	Identity = 42.41%
	4	gi 118475053 ref YP_891431.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-39	Identity = 44.39%
	5	gi 149195029 ref ZP_01872121.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-38	Identity = 48.43%
AB2053	1	petC gi 154175339 ref YP_001407598.1	Campylobacter curvus 525.92	E-value = 2.00E-82	Identity = 44.63%
	2	gi 157164244 ref YP_001466161.1	Campylobacter concisus 13826	E-value = 4.00E-81	Identity = 45.33%
	3	gi 118474682 ref YP_892589.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-80	Identity = 46.29%
	4	gi 34558433 ref NP_908248.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-78	Identity = 44.87%
	5	gi 57505419 ref ZP_00371347.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-73	Identity = 42.60%
AB2054	1	petB gi 152991326 ref YP_001357048.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-158	Identity = 73.65%
	2	gi 34558432 ref NP_908247.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-158	Identity = 70.77%
	3	gi 57240507 ref ZP_00368456.1	Campylobacter lari RM2100	E-value = 1.00E-157	Identity = 72.15%
	4	gi 57505418 ref ZP_00371346.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-156	Identity = 72.09%
	5	gi 153952423 ref YP_001397719.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-155	Identity = 72.70%
AB2055	1	petA gi 57505417 ref ZP_00371345.1	Campylobacter upsaliensis RM3195	E-value = 6.00E-48	Identity = 63.64%
	2	gi 118475313 ref YP_892587.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-47	Identity = 63.98%
	3	gi 57240508 ref ZP_00368457.1	Campylobacter lari RM2100	E-value = 5.00E-47	Identity = 61.21%
	4	gi 15792510 ref NP_282333.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-46	Identity = 59.39%
	5	gi 57168065 ref ZP_00367204.1	Campylobacter coli RM2228	E-value = 3.00E-46	Identity = 59.51%
AB2056	1	thrC gi 152993210 ref YP_001358931.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-173	Identity = 62.24%
	2	gi 78776988 ref YP_393303.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-169	Identity = 62.73%

	3	gi 152990785 ref YP_001356507.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-168	Identity = 62.32%
	4	gi 78485593 ref YP_391518.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-164	Identity = 58.25%
	5	gi 34558393 ref NP_908208.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-142	Identity = 55.71%
AB2057	1	argB gi 34558420 ref NP_908235.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-96	Identity = 62.54%
	2	gi 152990787 ref YP_001356509.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-95	Identity = 65.45%
	3	gi 78777052 ref YP_393367.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-95	Identity = 65.36%
	4	gi 152993214 ref YP_001358935.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-89	Identity = 62.87%
	5	gi 32265678 ref NP_859710.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-87	Identity = 56.78%
AB2058	1	gi 34557616 ref NP_907431.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-131	Identity = 35.28%
	2	gi 78776291 ref YP_392606.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-126	Identity = 37.61%
	3	gi 152991783 ref YP_001357504.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-123	Identity = 35.29%
	4	gi 152990115 ref YP_001355837.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-112	Identity = 35.09%
	5	gi 154174808 ref YP_001407581.1	Campylobacter curvus 525.92	E-value = 2.00E-110	Identity = 32.46%
AB2059	1		*** No matches found ***		
AB2060	1	prfB gi 152991276 ref YP_001356998.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-142	Identity = 75.07%
	2	gi 152991913 ref YP_001357634.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-134	Identity = 72.30%
	3	gi 78776561 ref YP_392876.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-132	Identity = 68.87%
	4	gi 34556562 ref NP_906377.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-132	Identity = 69.81%
	5	gi 118475480 ref YP_892510.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-131	Identity = 67.67%
AB2061	1	gi 24373301 ref NP_717344.1	Shewanella oneidensis MR-1	E-value = 1.00E-36	Identity = 57.94%
	2	gi 117921162 ref YP_870354.1	Shewanella sp. ANA-3	E-value = 1.00E-36	Identity = 57.94%
	3	gi 113970889 ref YP_734682.1	Shewanella sp. MR-4	E-value = 1.00E-36	Identity = 57.94%
	4	gi 126173778 ref YP_001049927.1	Shewanella baltica OS155	E-value = 2.00E-36	Identity = 57.14%
	5	gi 146292539 ref YP_001182963.1	Shewanella putrefaciens CN-32	E-value = 2.00E-36	Identity = 59.52%
AB2062	1	gi 78776289 ref YP_392604.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-102	Identity = 34.60%
	2	gi 152991781 ref YP_001357502.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-90	Identity = 30.43%
	3	gi 118475773 ref YP_891587.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-78	Identity = 31.50%
	4	gi 157164411 ref YP_001466191.1	Campylobacter concisus 13826	E-value = 5.00E-77	Identity = 30.35%
	5	gi 34556981 ref NP_906796.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-76	Identity = 29.56%
AB2063	1		*** No matches found ***		
AB2064	1	gi 154148411 ref YP_001406943.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-19	Identity = 28.44%
	2	gi 154173773 ref YP_001407578.1	Campylobacter curvus 525.92	E-value = 1.00E-17	Identity = 31.00%
	3	gi 152991353 ref YP_001357075.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-17	Identity = 33.99%
	4	gi 157164464 ref YP_001466185.1	Campylobacter concisus 13826	E-value = 1.00E-16	Identity = 31.03%
	5	gi 34556630 ref NP_906445.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-13	Identity = 25.41%
AB2065	1		*** No matches found ***		
AB2066	1		*** No matches found ***		
AB2067	1	ccoP gi 152991777 ref YP_001357498.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-83	Identity = 51.19%
	2	gi 78776285 ref YP_392600.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-71	Identity = 44.66%
	3	gi 152991356 ref YP_001357078.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-71	Identity = 51.57%
	4	gi 157164062 ref YP_001466183.1	Campylobacter concisus 13826	E-value = 3.00E-62	Identity = 45.42%
	5	gi 34556628 ref NP_906443.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-62	Identity = 43.97%
AB2068	1	ccoQ	*** No matches found ***		
AB2069	1	ccoO gi 57240906 ref ZP_00368854.1	Campylobacter lari RM2100	E-value = 4.00E-97	Identity = 73.76%
	2	gi 57169073 ref ZP_00368200.1	Campylobacter coli RM2228	E-value = 3.00E-96	Identity = 74.66%
	3	gi 152991775 ref YP_001357496.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-96	Identity = 75.00%
	4	gi 57242569 ref ZP_00370507.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-95	Identity = 74.21%
	5	gi 34556626 ref NP_906441.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-92	Identity = 72.73%
AB2070	1	ccoN gi 153951418 ref YP_001398790.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 0	Identity = 79.10%

	2	gi 57240905 ref ZP_00368853.1	Campylobacter lari RM2100	E-value = 0	Identity = 78.48%
	3	gi 118475616 ref YP_891580.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 77.71%
	4	gi 57169074 ref ZP_00368201.1	Campylobacter coli RM2228	E-value = 0	Identity = 77.87%
	5	gi 148925657 ref ZP_01809345.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 0	Identity = 78.89%
AB2071	1	<i>smpB</i> gi 154174845 ref YP_001408538.1	Campylobacter curvus 525.92	E-value = 3.00E-43	Identity = 69.44%
	2	gi 118474780 ref YP_891887.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-42	Identity = 64.58%
	3	gi 34557274 ref NP_907089.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-39	Identity = 63.95%
	4	gi 78776642 ref YP_392957.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-38	Identity = 60.96%
AB2072	1	<i>ispE</i> gi 32265620 ref NP_859652.1	Helicobacter hepaticus ATCC 51449	E-value = 6.00E-38	Identity = 57.82%
	2	gi 78776641 ref YP_392956.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-64	Identity = 51.18%
	3	gi 152991217 ref YP_001356939.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-56	Identity = 45.63%
	4	gi 152991977 ref YP_001357698.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-53	Identity = 44.80%
	5	gi 154174184 ref YP_001408537.1	Campylobacter curvus 525.92	E-value = 2.00E-48	Identity = 43.60%
AB2073	1	<i>truB</i> gi 149194065 ref ZP_01871163.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-46	Identity = 41.67%
	2	gi 152991979 ref YP_001357700.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-80	Identity = 55.68%
	3	gi 118474138 ref YP_891890.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-71	Identity = 53.16%
	4	gi 152991216 ref YP_001356938.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-68	Identity = 51.10%
	5	gi 78776639 ref YP_392954.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-66	Identity = 47.97%
AB2074	1	gi 57167989 ref ZP_00367128.1	Campylobacter coli RM2228	E-value = 2.00E-65	Identity = 52.94%
	2	gi 152991215 ref YP_001356937.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 61.88%
	3	gi 152991980 ref YP_001357701.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 59.48%
	4	gi 154174762 ref YP_001408534.1	Campylobacter curvus 525.92	E-value = 0	Identity = 60.64%
	5	gi 157164973 ref YP_001467057.1	Campylobacter concisus 13826	E-value = 0	Identity = 60.20%
AB2075	1	gi 78776638 ref YP_392953.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 58.65%
	2	gi 78776637 ref YP_392952.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-81	Identity = 54.70%
	3	gi 152991214 ref YP_001356936.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-79	Identity = 52.33%
	4	gi 34557268 ref NP_907083.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-77	Identity = 53.18%
	5	gi 152991981 ref YP_001357702.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-74	Identity = 50.84%
AB2076	1	gi 149194061 ref ZP_01871159.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-39	Identity = 35.05%
	2	gi 78778066 ref YP_394381.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-109	Identity = 62.18%
	3	gi 152991288 ref YP_001357010.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-107	Identity = 57.10%
	4	gi 34556884 ref NP_906699.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-99	Identity = 56.19%
	5	gi 149194160 ref ZP_01871258.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-96	Identity = 61.99%
AB2077	1	<i>purF</i> gi 32265988 ref NP_860020.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-95	Identity = 51.88%
	2	gi 152991832 ref YP_001357553.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-176	Identity = 66.97%
	3	gi 118475248 ref YP_891501.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-175	Identity = 67.71%
	4	gi 157164900 ref YP_001466027.1	Campylobacter concisus 13826	E-value = 1.00E-172	Identity = 66.74%
	5	gi 154174756 ref YP_001407520.1	Campylobacter curvus 525.92	E-value = 3.00E-171	Identity = 67.41%
AB2078	1	<i>dapB</i> gi 154147906 ref YP_001406908.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-169	Identity = 64.81%
	2	gi 149194158 ref ZP_01871256.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-85	Identity = 63.67%
	3	gi 152991831 ref YP_001357552.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-85	Identity = 62.65%
	4	gi 152991290 ref YP_001357012.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-84	Identity = 63.04%
	5	gi 78778064 ref YP_394379.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-83	Identity = 63.92%
AB2079	1	<i>trxB</i> gi 34556882 ref NP_906697.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-82	Identity = 59.92%
	2	gi 78778063 ref YP_394378.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-117	Identity = 68.18%
	3	gi 157414463 ref YP_001481719.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 1.00E-112	Identity = 66.99%
	4	gi 86151191 ref ZP_01069406.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-112	Identity = 66.67%
	5	gi 86153593 ref ZP_01071796.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 2.00E-112	Identity = 66.67%
	6	gi 15611831 ref NP_223482.1	Helicobacter pylori J99	E-value = 2.00E-112	Identity = 65.26%

AB2080	1	<i>trxA2</i>	gi 34556879 ref NP_906694.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-46	Identity = 80.00%
	2		gi 78778061 ref YP_394376.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-42	Identity = 76.19%
	3		gi 157165021 ref YP_001466032.1	Campylobacter concisus 13826	E-value = 1.00E-41	Identity = 76.19%
	4		gi 154174395 ref YP_001407510.1	Campylobacter curvus 525.92	E-value = 3.00E-41	Identity = 76.19%
	5		gi 154149269 ref YP_001405822.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-41	Identity = 74.29%
AB2081	1	<i>alaS</i>	gi 152991270 ref YP_001356992.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 62.30%
	2		gi 78778092 ref YP_394407.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 62.24%
	3		gi 152991942 ref YP_001357663.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 61.77%
	4		gi 154174082 ref YP_001408546.1	Campylobacter curvus 525.92	E-value = 0	Identity = 60.56%
	5		gi 57240482 ref ZP_00368431.1	Campylobacter lari RM2100	E-value = 0	Identity = 60.38%
AB2082	1		gi 28897148 ref NP_796753.1	Vibrio parahaemolyticus RIMD 2210633	E-value = 7.00E-59	Identity = 49.37%
	2		gi 151937737 gb EDN56587.1	Vibrio sp. Ex25	E-value = 1.00E-58	Identity = 47.70%
	3		gi 156973158 ref YP_001444065.1	Vibrio harveyi ATCC BAA-1116	E-value = 5.00E-58	Identity = 48.54%
	4		gi 153834236 ref ZP_01986903.1	Vibrio harveyi HY01	E-value = 1.00E-57	Identity = 48.54%
	5		gi 109898727 ref YP_661982.1	Pseudoalteromonas atlantica T6c	E-value = 3.00E-57	Identity = 47.84%
AB2083	1		gi 34557718 ref NP_907533.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-65	Identity = 39.41%
	2		gi 114319908 ref YP_741591.1	Alkalilimnicola ehrlichei MLHE-1	E-value = 1.00E-54	Identity = 38.14%
	3		gi 118474173 ref YP_891770.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-51	Identity = 34.50%
	4		gi 154149505 ref YP_001406398.1	Campylobacter hominis ATCC BAA-381	E-value = 9.00E-50	Identity = 34.14%
	5		gi 121999073 ref YP_001003860.1	Halorhodospira halophila SL1	E-value = 1.00E-48	Identity = 33.61%
AB2084	1			<b>*** No matches found ***</b>		
AB2085	1		gi 152993177 ref YP_001358898.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-41	Identity = 60.43%
	2		gi 78776314 ref YP_392629.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-34	Identity = 56.03%
AB2086	1		gi 152993670 ref YP_001359391.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-72	Identity = 42.72%
	2		gi 157163896 ref YP_001466683.1	Campylobacter concisus 13826	E-value = 2.00E-49	Identity = 33.08%
	3		gi 152991456 ref YP_001357178.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-49	Identity = 33.99%
	4		gi 154174937 ref YP_001408398.1	Campylobacter curvus 525.92	E-value = 9.00E-49	Identity = 33.17%
	5		gi 118474309 ref YP_891937.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-47	Identity = 33.25%
AB2087	1		gi 152993671 ref YP_001359392.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-56	Identity = 59.82%
	2		gi 157164458 ref YP_001466682.1	Campylobacter concisus 13826	E-value = 7.00E-53	Identity = 54.09%
	3		gi 154174385 ref YP_001408399.1	Campylobacter curvus 525.92	E-value = 1.00E-52	Identity = 54.05%
	4		gi 118474546 ref YP_891938.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-51	Identity = 54.55%
	5		gi 154149383 ref YP_001406539.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-50	Identity = 51.80%
AB2088	1	<i>htrA</i>	gi 152991454 ref YP_001357176.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-116	Identity = 50.95%
	2		gi 15611473 ref NP_223124.1	Helicobacter pylori J99	E-value = 4.00E-112	Identity = 49.68%
	3		gi 108562853 ref YP_627169.1	Helicobacter pylori HPAG1	E-value = 6.00E-112	Identity = 50.11%
	4		gi 34558499 ref NP_908314.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-111	Identity = 48.12%
	5		gi 109947655 ref YP_664883.1	Helicobacter acinonychis str. Sheeba	E-value = 2.00E-110	Identity = 49.46%
AB2089	1	<i>ilvD</i>	gi 146300963 ref YP_001195554.1	Flavobacterium johnsoniae UW101	E-value = 0	Identity = 87.72%
	2		gi 152993997 ref YP_001359718.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 82.74%
	3		gi 149194931 ref ZP_01872024.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 76.16%
	4		gi 152989876 ref YP_001355598.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 76.91%
	5		gi 157165359 ref YP_001467789.1	Campylobacter concisus 13826	E-value = 0	Identity = 75.36%
AB2090	1	<i>int</i>	gi 119357428 ref YP_912072.1	Chlorobium phaeobacteroides DSM 266	E-value = 1.00E-51	Identity = 31.19%
	2		gi 85859572 ref YP_461774.1	Syntrophus aciditrophicus SB	E-value = 7.00E-48	Identity = 30.79%
	3		gi 118745460 ref ZP_01593434.1	Geobacter lovleyi SZ	E-value = 5.00E-47	Identity = 29.76%
	4		gi 118707336 ref ZP_01559922.1	Burkholderia cenocepacia MC0-3	E-value = 2.00E-46	Identity = 30.05%
	5		gi 83718523 ref YP_441483.1	Burkholderia thailandensis E264	E-value = 4.00E-46	Identity = 28.64%
AB2091	1		gi 14194406 gb AAK56382.1 AF378539_1	unidentified bacterium	E-value = 1.00E-10	Identity = 39.39%

AB2092	1		*** No matches found ***		
AB2093	1		*** No matches found ***		
AB2094	1	gi 118475596 ref YP_892827.1	Campylobacter fetus subsp. fetus 82-40	E-value = 5.00E-14	Identity = 31.39%
	2	gi 157164949 ref YP_001467751.1	Campylobacter concisus 13826	E-value = 4.00E-11	Identity = 30.74%
	3	gi 154148951 ref YP_001407001.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-09	Identity = 27.95%
	4	gi 34558319 ref NP_908134.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-07	Identity = 28.77%
AB2095	1		*** No matches found ***		
AB2096	1		*** No matches found ***		
AB2097	1		*** No matches found ***		
AB2098	1		*** No matches found ***		
AB2099	1	gi 34556822 ref NP_906637.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-58	Identity = 44.38%
	2	gi 157163875 ref YP_001467827.1	Campylobacter concisus 13826	E-value = 1.00E-53	Identity = 41.32%
	3	gi 90407986 ref ZP_01216159.1	Psychromonas sp. CNPT3	E-value = 4.00E-42	Identity = 37.70%
	4	gi 78777512 ref YP_393827.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-37	Identity = 41.43%
	5	gi 154148650 ref YP_001406101.1	Campylobacter hominis ATCC BAA-381	E-value = 8.00E-32	Identity = 38.24%
AB2100	1	gi 157163867 ref YP_001467828.1	Campylobacter concisus 13826	E-value = 8.00E-57	Identity = 52.94%
	2	gi 34556821 ref NP_906636.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-57	Identity = 50.22%
	3	gi 78777513 ref YP_393828.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-55	Identity = 56.11%
	4	gi 83312015 ref YP_422279.1	Magnetospirillum magneticum AMB-1	E-value = 7.00E-47	Identity = 39.46%
	5	gi 154149411 ref YP_001406100.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-45	Identity = 54.90%
AB2101	1	gi 78777514 ref YP_393829.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-60	Identity = 38.79%
	2	gi 90407988 ref ZP_01216161.1	Psychromonas sp. CNPT3	E-value = 1.00E-55	Identity = 31.52%
	3	gi 124003207 ref ZP_01688057.1	Microscilla marina ATCC 23134	E-value = 8.00E-51	Identity = 29.61%
	4	gi 154148489 ref YP_001406099.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-45	Identity = 36.01%
	5	gi 157165309 ref YP_001467829.1	Campylobacter concisus 13826	E-value = 5.00E-44	Identity = 32.56%
AB2103	1	gi 34556603 ref NP_906418.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-15	Identity = 39.64%
	2	gi 152990732 ref YP_001356454.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-14	Identity = 50.00%
	3	gi 154149522 ref YP_001406123.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-14	Identity = 41.59%
	4	gi 157165088 ref YP_001466367.1	Campylobacter concisus 13826	E-value = 1.00E-13	Identity = 39.29%
	5	gi 118475537 ref YP_891453.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-13	Identity = 38.60%
AB2104	1	gi 78777538 ref YP_393853.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-66	Identity = 48.41%
	2	gi 152990974 ref YP_001356696.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-59	Identity = 44.10%
	3	gi 34557593 ref NP_907408.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-56	Identity = 37.43%
	4	gi 149193912 ref ZP_01871010.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-52	Identity = 39.30%
	5	gi 152990441 ref YP_001356163.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-52	Identity = 37.54%
AB2105	1	gi 152990916 ref YP_001356638.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-42	Identity = 28.96%
	2	gi 34557200 ref NP_907015.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-41	Identity = 30.98%
	3	gi 157164066 ref YP_001467456.1	Campylobacter concisus 13826	E-value = 1.00E-34	Identity = 31.08%
	4	gi 152992016 ref YP_001357737.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-31	Identity = 30.25%
	5	gi 154175383 ref YP_001407783.1	Campylobacter curvus 525.92	E-value = 4.00E-31	Identity = 32.37%
AB2106	1	gi 152990917 ref YP_001356639.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-16	Identity = 29.74%
	2	gi 157164673 ref YP_001467457.1	Campylobacter concisus 13826	E-value = 3.00E-15	Identity = 33.67%
	3	gi 153951242 ref YP_001398561.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 6.00E-14	Identity = 37.57%
	4	gi 157414692 ref YP_001481948.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 7.00E-14	Identity = 37.57%
	5	gi 15791764 ref NP_281587.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 7.00E-14	Identity = 37.57%
AB2107	1	gi 118474694 ref YP_892114.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-127	Identity = 60.19%
	2	gi 157164709 ref YP_001466744.1	Campylobacter concisus 13826	E-value = 1.00E-125	Identity = 60.23%
	3	gi 154174324 ref YP_001408298.1	Campylobacter curvus 525.92	E-value = 1.00E-125	Identity = 60.14%
	4	gi 152990622 ref YP_001356344.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-120	Identity = 56.55%

AB2108	5	gi 57238286 ref YP_178633.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 8.00E-119	Identity = 58.14%
	1	gi 51246354 ref YP_066238.1	Desulfotalea psychrophila LSv54	E-value = 2.00E-26	Identity = 32.71%
	2	gi 59800779 ref YP_207491.1	Neisseria gonorrhoeae FA 1090	E-value = 2.00E-25	Identity = 31.37%
	3	gi 91776594 ref YP_546350.1	Methylobacillus flagellatus KT	E-value = 1.00E-24	Identity = 31.97%
	4	gi 94264336 ref ZP_01288128.1	delta proteobacterium MLMS-1	E-value = 6.00E-24	Identity = 32.62%
	5	gi 153095129 gb EDN75676.1	Mannheimia haemolytica PHL213	E-value = 7.00E-24	Identity = 34.01%
AB2109	1	gi 152993049 ref YP_001358770.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-17	Identity = 72.73%
	2	gi 152990620 ref YP_001356342.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-16	Identity = 64.20%
	3	gi 78776690 ref YP_393005.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-15	Identity = 61.25%
	4	gi 154174281 ref YP_001408300.1	Campylobacter curvus 525.92	E-value = 1.00E-14	Identity = 57.14%
	5	gi 82523985 emb CAI78796.1	uncultured epsilon proteobacterium	E-value = 1.00E-14	Identity = 58.75%
AB2110	1	gi 82523984 emb CAI78795.1	uncultured epsilon proteobacterium	E-value = 4.00E-92	Identity = 71.17%
	2	gi 78776689 ref YP_393004.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-91	Identity = 68.61%
	3	gi 152993050 ref YP_001358771.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-90	Identity = 68.33%
	4	gi 152990619 ref YP_001356341.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-87	Identity = 64.57%
	5	gi 157165019 ref YP_001466741.1	Campylobacter concisus 13826	E-value = 5.00E-81	Identity = 63.96%
AB2111	1	gi 57167563 ref ZP_00366703.1	Campylobacter coli RM2228	E-value = 6.00E-35	Identity = 30.63%
	2	gi 57241176 ref ZP_00369123.1	Campylobacter lari RM2100	E-value = 6.00E-35	Identity = 29.50%
	3	gi 157414799 ref YP_001482055.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 2.00E-34	Identity = 27.98%
	4	gi 15791877 ref NP_281700.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 4.00E-34	Identity = 28.27%
	5	gi 57238282 ref YP_178637.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 5.00E-34	Identity = 27.98%
AB2112	1	gi 34557019 ref NP_906834.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-42	Identity = 39.38%
	2	gi 118474516 ref YP_892119.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-41	Identity = 40.45%
	3	gi 154173980 ref YP_001408302.1	Campylobacter curvus 525.92	E-value = 2.00E-40	Identity = 38.29%
	4	gi 154148369 ref YP_001406407.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-38	Identity = 43.24%
	5	gi 15645961 ref NP_208140.1	Helicobacter pylori 26695	E-value = 4.00E-37	Identity = 36.68%
AB2113	1	gi 82523981 emb CAI78792.1	uncultured epsilon proteobacterium	E-value = 7.00E-16	Identity = 47.66%
	2	gi 78776686 ref YP_393001.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-15	Identity = 47.66%
	3	gi 57238280 ref YP_178639.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 8.00E-12	Identity = 46.96%
	4	gi 86151783 ref ZP_01069997.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 1.00E-11	Identity = 46.96%
	5	gi 152992868 ref YP_001358589.1	Sulfurovum sp. NBC37-1	E-value = 3.00E-11	Identity = 44.92%
AB2114	1	gi 34556633 ref NP_906448.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-08	Identity = 55.00%
	2	gi 78777989 ref YP_394304.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-07	Identity = 47.30%
	3	gi 156719078 ref ZP_02060727.1	Hydrogenobaculum sp. Y04AAS1	E-value = 2.00E-06	Identity = 47.54%
	4	gi 124002667 ref ZP_01687519.1	Microscilla marina ATCC 23134	E-value = 4.00E-06	Identity = 48.53%
AB2115	1	gi 34556633 ref NP_906448.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-10	Identity = 56.76%
	2	gi 78777989 ref YP_394304.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-08	Identity = 50.00%
	3	gi 124002667 ref ZP_01687519.1	Microscilla marina ATCC 23134	E-value = 4.00E-06	Identity = 43.66%
AB2116	1	gi 152991237 ref YP_001356959.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-172	Identity = 57.47%
	2	gi 154173779 ref YP_001407667.1	Campylobacter curvus 525.92	E-value = 1.00E-169	Identity = 56.79%
	3	gi 34556632 ref NP_906447.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-167	Identity = 56.14%
	4	gi 57240498 ref ZP_00368447.1	Campylobacter lari RM2100	E-value = 8.00E-167	Identity = 56.14%
	5	gi 15792499 ref NP_282322.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 6.00E-166	Identity = 55.20%
AB2117	1	gi 118474789 ref YP_892570.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-24	Identity = 60.00%
	2	gi 57240953 ref ZP_00368901.1	Campylobacter lari RM2100	E-value = 1.00E-23	Identity = 55.56%
	3	gi 78777950 ref YP_394265.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-23	Identity = 54.63%
	4	gi 32265849 ref NP_859881.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-21	Identity = 54.46%
	5	gi 152991236 ref YP_001356958.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-21	Identity = 53.00%
AB2118	1	gi 152991235 ref YP_001356957.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-40	Identity = 48.85%

	2	gi 57505271 ref ZP_00371200.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-35	Identity = 46.59%
	3	gi 118475033 ref YP_892569.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-34	Identity = 46.11%
	4	gi 57168944 ref ZP_00368073.1	Campylobacter coli RM2228	E-value = 4.00E-34	Identity = 44.81%
	5	gi 149195101 ref ZP_01872193.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-33	Identity = 49.43%
AB2119	1	<i>gapA</i> gi 152993780 ref YP_001359501.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-140	Identity = 75.53%
	2	gi 78777948 ref YP_394263.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-114	Identity = 62.24%
	3	gi 157164277 ref YP_001467354.1	Campylobacter concisus 13826	E-value = 6.00E-110	Identity = 62.46%
	4	gi 154175057 ref YP_001407672.1	Campylobacter curvus 525.92	E-value = 4.00E-107	Identity = 61.89%
AB2120	5	<i>pgk</i> gi 57505272 ref ZP_00371201.1	Campylobacter upsaliensis RM3195	E-value = 1.00E-105	Identity = 59.57%
	1	gi 78777947 ref YP_394262.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-159	Identity = 68.35%
	2	gi 57240950 ref ZP_00368898.1	Campylobacter lari RM2100	E-value = 8.00E-152	Identity = 67.59%
	3	gi 152991233 ref YP_001356955.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-150	Identity = 65.74%
	4	gi 154173771 ref YP_001407673.1	Campylobacter curvus 525.92	E-value = 4.00E-150	Identity = 66.32%
	5	gi 149195103 ref ZP_01872195.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-149	Identity = 65.24%
AB2121	1	<i>tpiA</i> gi 78777946 ref YP_394261.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-70	Identity = 55.56%
	2	gi 34556853 ref NP_906668.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-69	Identity = 51.97%
	3	gi 152993778 ref YP_001359499.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-65	Identity = 51.32%
	4	gi 152991232 ref YP_001356954.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-61	Identity = 50.00%
	5	gi 149195104 ref ZP_01872196.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-57	Identity = 51.28%
AB2122	1	<i>fabI</i> gi 152992312 ref YP_001358033.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-122	Identity = 81.32%
	2	gi 34556852 ref NP_906667.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-101	Identity = 67.78%
	3	gi 152991231 ref YP_001356953.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-98	Identity = 65.43%
	4	gi 153951593 ref YP_001398703.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-97	Identity = 66.79%
	5	gi 157415633 ref YP_001482889.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 1.00E-97	Identity = 66.79%
AB2123	1	<i>lysA</i> gi 82523967 emb CAI78778.1	uncultured epsilon proteobacterium	E-value = 1.00E-164	Identity = 70.07%
	2	gi 78776669 ref YP_392984.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-164	Identity = 70.50%
	3	gi 149194454 ref ZP_01871551.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-163	Identity = 71.07%
	4	gi 152993635 ref YP_001359356.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-158	Identity = 66.17%
	5	gi 152990136 ref YP_001355858.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-156	Identity = 67.67%
AB2124	1	<i>pheA</i> gi 152993634 ref YP_001359355.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-122	Identity = 62.32%
	2	gi 152990138 ref YP_001355860.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-109	Identity = 60.73%
	3	gi 82523968 emb CAI78779.1	uncultured epsilon proteobacterium	E-value = 1.00E-108	Identity = 58.76%
	4	gi 34556767 ref NP_906582.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-105	Identity = 54.37%
	5	gi 78776671 ref YP_392986.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-104	Identity = 57.63%
AB2125	1	<i>hisC</i> gi 34558287 ref NP_908102.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-132	Identity = 62.13%
	2	gi 82523969 emb CAI78780.1	uncultured epsilon proteobacterium	E-value = 7.00E-122	Identity = 59.34%
	3	gi 152990139 ref YP_001355861.1	Nitratiruptor sp. SB155-2	E-value = 9.00E-121	Identity = 59.34%
	4	gi 157165462 ref YP_001466461.1	Campylobacter concisus 13826	E-value = 5.00E-120	Identity = 60.22%
	5	gi 78776672 ref YP_392987.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-119	Identity = 59.89%
AB2126	1	<i>dxs</i> gi 152993632 ref YP_001359353.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 65.28%
	2	gi 82523973 emb CAI78784.1	uncultured epsilon proteobacterium	E-value = 0	Identity = 65.07%
	3	gi 152990140 ref YP_001355862.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 64.95%
	4	gi 78776676 ref YP_392991.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 63.74%
	5	gi 118475513 ref YP_891468.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 61.98%
AB2127	1	gi 152992824 ref YP_001358545.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-135	Identity = 73.58%
	2	gi 34557828 ref NP_907643.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-134	Identity = 68.34%
	3	gi 78776415 ref YP_392730.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-124	Identity = 65.18%
	4	gi 157414655 ref YP_001481911.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 2.00E-121	Identity = 63.91%
	5	gi 57237413 ref YP_178426.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 4.00E-121	Identity = 63.61%

AB2128	1	gi 78778090 ref YP_394405.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-50	Identity = 59.67%
	2	gi 152991267 ref YP_001356989.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-45	Identity = 55.31%
	3	gi 34556760 ref NP_906575.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-38	Identity = 54.48%
	4	gi 149194978 ref ZP_01872071.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-35	Identity = 50.00%
	5	gi 152991944 ref YP_001357665.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-35	Identity = 52.81%
AB2129	1	gi 149375503 ref ZP_01893273.1	Marinobacter algicola DG893	E-value = 1.00E-50	Identity = 38.41%
	2	gi 149927298 ref ZP_01915554.1	Limnobacter sp. MED105	E-value = 1.00E-44	Identity = 34.84%
	3	gi 78223840 ref YP_385587.1	Geobacter metallireducens GS-15	E-value = 7.00E-23	Identity = 27.16%
	4	gi 39997777 ref NP_953728.1	Geobacter sulfurreducens PCA	E-value = 7.00E-21	Identity = 25.64%
	5	gi 18977768 ref NP_579125.1	Pyrococcus furiosus DSM 3638	E-value = 8.00E-21	Identity = 28.38%
AB2130	1	gi 89092478 ref ZP_01165431.1	Oceanospirillum sp. MED92	E-value = 1.00E-40	Identity = 29.48%
	2	gi 56479463 ref YP_161052.1	Azoarcus sp. EbN1	E-value = 5.00E-40	Identity = 29.77%
	3	gi 95930322 ref ZP_01313059.1	Desulfuromonas acetoxidans DSM 684	E-value = 3.00E-38	Identity = 30.87%
	4	gi 92114022 ref YP_573950.1	Chromohalobacter salexigens DSM 3043	E-value = 5.00E-38	Identity = 32.41%
	5	gi 152995886 ref YP_001340721.1	Marinomonas sp. MWYL1	E-value = 8.00E-38	Identity = 31.70%
AB2131	1	gi 52425388 ref YP_088525.1	Mannheimia succiniciproducens MBEL55E	E-value = 1.00E-28	Identity = 41.05%
	2	gi 85058930 ref YP_454632.1	Sodalis glossinidius str. 'morsitans'	E-value = 3.00E-27	Identity = 38.61%
	3	gi 156933250 ref YP_001437166.1	Enterobacter sakazakii ATCC BAA-894	E-value = 1.00E-26	Identity = 36.20%
	4	gi 77974755 ref ZP_00830293.1	Yersinia frederiksenii ATCC 33641	E-value = 1.00E-26	Identity = 37.65%
	5	gi 123441757 ref YP_001005741.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 8.00E-26	Identity = 37.04%
AB2132	1	gi 34557562 ref NP_907377.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-37	Identity = 44.02%
	2	gi 152991538 ref YP_001357260.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-35	Identity = 43.56%
	3	gi 118474814 ref YP_891973.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-31	Identity = 40.53%
	4	gi 157164227 ref YP_001466426.1	Campylobacter concisus 13826	E-value = 4.00E-30	Identity = 39.47%
	5	gi 156719026 ref ZP_02060677.1	Hydrogenobaculum sp. Y04AAS1	E-value = 3.00E-29	Identity = 38.28%
AB2133	1	gi 149194267 ref ZP_01871364.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-22	Identity = 50.46%
	2	gi 34558386 ref NP_908201.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-20	Identity = 44.07%
	3	gi 118474666 ref YP_892245.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-13	Identity = 41.07%
	4	gi 154174906 ref YP_001408049.1	Campylobacter curvus 525.92	E-value = 4.00E-13	Identity = 41.74%
	5	gi 148262376 ref YP_001229082.1	Geobacter uraniumreducens Rf4	E-value = 4.00E-07	Identity = 31.68%
AB2134	1	gi 59712720 ref YP_205496.1	Vibrio fischeri ES114	E-value = 1.00E-64	Identity = 56.02%
	2	gi 124523398 ref ZP_01697522.1	Bacillus coagulans 36D1	E-value = 5.00E-64	Identity = 55.87%
	3	gi 113460626 ref YP_718692.1	Haemophilus somnus 129PT	E-value = 1.00E-63	Identity = 50.70%
	4	gi 149192226 ref ZP_01870441.1	Vibrio shilonii AK1	E-value = 1.00E-62	Identity = 50.00%
	5	gi 89072524 ref ZP_01159096.1	Photobacterium sp. SKA34	E-value = 2.00E-62	Identity = 51.63%
AB2135	1	gi 124005320 ref ZP_01690161.1	Microscilla marina ATCC 23134	E-value = 3.00E-158	Identity = 59.30%
	2	gi 71279133 ref YP_270035.1	Colwellia psychrerythraea 34H	E-value = 1.00E-144	Identity = 54.49%
	3	gi 149925663 ref ZP_01913927.1	Limnobacter sp. MED105	E-value = 8.00E-141	Identity = 53.71%
	4	gi 126739065 ref ZP_01754759.1	Roseobacter sp. SK209-2-6	E-value = 9.00E-141	Identity = 54.17%
	5	gi 85709162 ref ZP_01040228.1	Erythrobacter sp. NAP1	E-value = 4.00E-138	Identity = 52.19%
AB2136	1	gi 124005319 ref ZP_01690160.1	Microscilla marina ATCC 23134	E-value = 0	Identity = 71.72%
	2	gi 126665546 ref ZP_01736528.1	Marinobacter sp. ELB17	E-value = 0	Identity = 67.03%
	3	gi 149925662 ref ZP_01913926.1	Limnobacter sp. MED105	E-value = 0	Identity = 61.90%
	4	gi 88795734 ref ZP_01111426.1	Alteromonas macleodii 'Deep ecotype'	E-value = 0	Identity = 64.51%
	5	gi 109900149 ref YP_663404.1	Pseudoalteromonas atlantica T6c	E-value = 0	Identity = 62.57%
AB2137	1	gi 23502675 ref NP_698802.1	Brucella suis 1330	E-value = 4.00E-53	Identity = 58.97%
	2	gi 17986512 ref NP_539146.1	Brucella melitensis 16M	E-value = 1.00E-52	Identity = 58.97%
	3	gi 153008415 ref YP_001369630.1	Ochrobactrum anthropi ATCC 49188	E-value = 1.00E-52	Identity = 56.92%
	4	gi 70728732 ref YP_258481.1	Pseudomonas fluorescens Pf-5	E-value = 5.00E-52	Identity = 61.49%



	5	gi 110834743 ref YP_693602.1	Alcanivorax borkumensis SK2	E-value = 1.00E-51	Identity = 58.20%
AB2138	1	gi 146280843 ref YP_001170996.1	Pseudomonas stutzeri A1501	E-value = 5.00E-24	Identity = 32.35%
	2	gi 89072216 ref ZP_01158795.1	Photobacterium sp. SKA34	E-value = 8.00E-24	Identity = 35.18%
	3	gi 90577423 ref ZP_01233234.1	Vibrio angustum S14	E-value = 8.00E-24	Identity = 35.18%
	4	gi 117619000 ref YP_856321.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 2.00E-20	Identity = 30.26%
	5	gi 70728735 ref YP_258484.1	Pseudomonas fluorescens Pf-5	E-value = 3.00E-20	Identity = 29.41%
AB2139	1	gi 68549041 ref ZP_00588509.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 2.00E-27	Identity = 33.46%
	2	gi 90422845 ref YP_531215.1	Rhodopseudomonas palustris BisB18	E-value = 4.00E-23	Identity = 30.29%
	3	gi 146338498 ref YP_001203546.1	Bradyrhizobium sp. ORS278	E-value = 1.00E-22	Identity = 30.80%
	4	gi 39934644 ref NP_946920.1	Rhodopseudomonas palustris CGA009	E-value = 4.00E-22	Identity = 29.79%
	5	gi 114331384 ref YP_747606.1	Nitrosomonas eutropha C91	E-value = 3.00E-21	Identity = 30.57%
AB2140	1 <i>gph</i>	gi 51245986 ref YP_065870.1	Desulfotalea psychrophila LSv54	E-value = 3.00E-50	Identity = 46.41%
	2	gi 91203839 emb CAJ71492.1	Candidatus Kuenenia stuttgartiensis	E-value = 7.00E-45	Identity = 44.60%
	3	gi 116750803 ref YP_847490.1	Syntrophobacter fumaroxidans MPOB	E-value = 1.00E-43	Identity = 42.06%
	4	gi 120603872 ref YP_968272.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 7.00E-41	Identity = 41.98%
	5	gi 46578547 ref YP_009355.1	Desulfovibrio vulgaris subsp. vulgaris str. Hildenborough	E-value = 1.00E-40	Identity = 41.51%
AB2141	1	gi 32265709 ref NP_859741.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-36	Identity = 55.00%
	2	gi 34557913 ref NP_907728.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-35	Identity = 55.00%
	3	gi 33316782 gb AAQ04636.1 AF444005_1	Helicobacter bilis	E-value = 6.00E-33	Identity = 54.41%
	4	gi 15792842 ref NP_282665.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-31	Identity = 52.52%
	5	gi 157415752 ref YP_001483008.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-31	Identity = 52.52%
AB2142	1	gi 88861263 ref ZP_01135895.1	Pseudoalteromonas tunicata D2	E-value = 3.00E-55	Identity = 29.56%
AB2143	1	gi 88861264 ref ZP_01135896.1	Pseudoalteromonas tunicata D2	E-value = 2.00E-07	Identity = 33.63%
AB2144	1	gi 92113599 ref YP_573527.1	Chromohalobacter salexigens DSM 3043	E-value = 3.00E-49	Identity = 34.34%
	2	gi 83646919 ref YP_435354.1	Hahella chejuensis KCTC 2396	E-value = 8.00E-44	Identity = 32.31%
	3	gi 110834264 ref YP_693123.1	Alcanivorax borkumensis SK2	E-value = 4.00E-43	Identity = 34.44%
	4	gi 78485221 ref YP_391146.1	Thiomicrospira crunogena XCL-2	E-value = 2.00E-42	Identity = 33.93%
	5	gi 107022043 ref YP_620370.1	Burkholderia cenocepacia AU 1054	E-value = 8.00E-40	Identity = 28.77%
AB2145	1		<b>*** No matches found ***</b>		
AB2146	1	gi 149908639 ref ZP_01897300.1	Moritella sp. PE36	E-value = 2.00E-31	Identity = 28.23%
	2	gi 82701771 ref YP_411337.1	Nitrosospira multiformis ATCC 25196	E-value = 2.00E-31	Identity = 27.03%
AB2147	1	gi 123440822 ref YP_001004813.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 9.00E-88	Identity = 48.77%
	2	gi 16123629 ref NP_406942.1	Yersinia pestis CO92	E-value = 6.00E-87	Identity = 48.63%
	3	gi 153947901 ref YP_001402540.1	Yersinia pseudotuberculosis IP 31758	E-value = 6.00E-87	Identity = 48.36%
	4	gi 109900099 ref YP_663354.1	Pseudoalteromonas atlantica T6c	E-value = 6.00E-85	Identity = 47.22%
	5	gi 120601547 ref YP_965947.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 3.00E-77	Identity = 44.14%
AB2148	1	gi 153948753 ref YP_001402539.1	Yersinia pseudotuberculosis IP 31758	E-value = 0	Identity = 63.11%
	2	gi 51594844 ref YP_069035.1	Yersinia pseudotuberculosis IP 32953	E-value = 0	Identity = 63.02%
	3	gi 16123628 ref NP_406941.1	Yersinia pestis CO92	E-value = 0	Identity = 63.02%
	4	gi 123440823 ref YP_001004814.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 0	Identity = 62.12%
	5	gi 152995028 ref YP_001339863.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 60.19%
AB2149	1	gi 83748930 ref ZP_00945940.1	Ralstonia solanacearum UW551	E-value = 5.00E-96	Identity = 41.74%
	2	gi 17549038 ref NP_522378.1	Ralstonia solanacearum GMI1000	E-value = 2.00E-95	Identity = 44.20%
	3	gi 148265519 ref YP_001232225.1	Geobacter uraniumreducens Rf4	E-value = 5.00E-93	Identity = 44.15%
	4	gi 118744030 ref ZP_01592028.1	Geobacter lovleyi SZ	E-value = 6.00E-92	Identity = 41.41%
	5	gi 118578771 ref YP_900021.1	Pelobacter propionicus DSM 2379	E-value = 1.00E-89	Identity = 41.81%
AB2150	1	gi 30248820 ref NP_840890.1	Nitrosomonas europaea ATCC 19718	E-value = 3.00E-139	Identity = 40.08%
	2	gi 30249066 ref NP_841136.1	Nitrosomonas europaea ATCC 19718	E-value = 1.00E-133	Identity = 39.14%
	3	gi 30248981 ref NP_841051.1	Nitrosomonas europaea ATCC 19718	E-value = 4.00E-133	Identity = 38.88%

	4	gi 66047091 ref YP_236932.1	Pseudomonas syringae pv. syringae B728a	E-value = 1.00E-122	Identity = 36.08%
	5	gi 28871270 ref NP_793889.1	Pseudomonas syringae pv. tomato str. DC3000	E-value = 4.00E-121	Identity = 35.63%
AB2151	1	gi 34557769 ref NP_907584.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-35	Identity = 32.51%
	2	gi 34557007 ref NP_906822.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-35	Identity = 28.88%
	3	gi 70731396 ref YP_261137.1	Pseudomonas fluorescens Pf-5	E-value = 8.00E-31	Identity = 25.82%
	4	gi 77460007 ref YP_349514.1	Pseudomonas fluorescens PFO-1	E-value = 4.00E-29	Identity = 26.47%
	5	gi 30248821 ref NP_840891.1	Nitrosomonas europaea ATCC 19718	E-value = 1.00E-27	Identity = 26.20%
AB2152	1	gi 34557006 ref NP_906821.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-22	Identity = 39.35%
	2	gi 30249178 ref NP_841248.1	Nitrosomonas europaea ATCC 19718	E-value = 4.00E-19	Identity = 34.69%
	3	gi 34557770 ref NP_907585.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-19	Identity = 36.36%
	4	gi 30248569 ref NP_840639.1	Nitrosomonas europaea ATCC 19718	E-value = 6.00E-17	Identity = 33.55%
	5	gi 104782680 ref YP_609178.1	Pseudomonas entomophila L48	E-value = 8.00E-17	Identity = 32.47%
AB2153	1		<b>*** No matches found ***</b>		
AB2154	1	gi 78776953 ref YP_393268.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-94	Identity = 46.91%
	2	gi 34557963 ref NP_907778.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-92	Identity = 45.08%
	3	gi 28209891 ref NP_780835.1	Clostridium tetani E88	E-value = 3.00E-69	Identity = 38.02%
	4	gi 152993929 ref YP_001359650.1	Sulfurovum sp. NBC37-1	E-value = 7.00E-69	Identity = 37.69%
	5	gi 15896824 ref NP_350173.1	Clostridium acetobutylicum ATCC 824	E-value = 1.00E-66	Identity = 36.12%
AB2155	1	gi 119946479 ref YP_944159.1	Psychromonas ingrahamii 37	E-value = 2.00E-21	Identity = 49.50%
	2	gi 59711949 ref YP_204725.1	Vibrio fischeri ES114	E-value = 1.00E-19	Identity = 47.52%
	3	gi 67939411 ref ZP_00531913.1	Chlorobium phaeobacteroides BS1	E-value = 2.00E-19	Identity = 46.53%
	4	gi 145219387 ref YP_001130096.1	Prosthecochloris vibriiformis DSM 265	E-value = 6.00E-19	Identity = 45.54%
	5	gi 148975530 ref ZP_01812401.1	Vibrionales bacterium SWAT-3	E-value = 6.00E-19	Identity = 47.52%
AB2156	1	<i>metY</i> gi 152991021 ref YP_001356743.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-146	Identity = 63.90%
	2	gi 118474795 ref YP_892089.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-144	Identity = 63.83%
	3	gi 157164414 ref YP_001466687.1	Campylobacter concisus 13826	E-value = 5.00E-142	Identity = 60.14%
	4	gi 152993374 ref YP_001359095.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-141	Identity = 62.47%
	5	gi 78776964 ref YP_393279.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-141	Identity = 59.00%
AB2157	1	<i>iscR</i> gi 78776353 ref YP_392668.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-39	Identity = 62.04%
	2	gi 34557102 ref NP_906917.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-23	Identity = 44.09%
	3	gi 118475649 ref YP_892090.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-18	Identity = 41.13%
	4	gi 83590489 ref YP_430498.1	Moorella thermoacetica ATCC 39073	E-value = 4.00E-18	Identity = 36.59%
	5	gi 152990511 ref YP_001356233.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-18	Identity = 34.78%
AB2158	1	<i>cysK1</i> gi 78776355 ref YP_392670.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-111	Identity = 68.61%
	2	gi 78776634 ref YP_392949.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-105	Identity = 66.67%
	3	gi 118474133 ref YP_892091.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-102	Identity = 63.73%
	4	gi 125974344 ref YP_001038254.1	Clostridium thermocellum ATCC 27405	E-value = 2.00E-102	Identity = 66.12%
	5	gi 34557557 ref NP_907372.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-101	Identity = 67.53%
AB2159	1	gi 78776356 ref YP_392671.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-23	Identity = 72.37%
	2	gi 86134274 ref ZP_01052856.1	Tenacibaculum sp. MED152	E-value = 1.00E-16	Identity = 62.12%
	3	gi 126646383 ref ZP_01718900.1	Algoriphagus sp. PR1	E-value = 5.00E-14	Identity = 51.47%
	4	gi 120434689 ref YP_860376.1	Gramella forsetii KT0803	E-value = 8.00E-14	Identity = 53.13%
	5	gi 149186184 ref ZP_01864498.1	Erythrobacter sp. SD-21	E-value = 6.00E-12	Identity = 52.17%
AB2160	1	<i>cysH</i> gi 78776357 ref YP_392672.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-81	Identity = 62.07%
	2	gi 110598811 ref ZP_01387069.1	Chlorobium ferrooxidans DSM 13031	E-value = 8.00E-70	Identity = 51.28%
	3	gi 42557692 emb CAF28667.1	uncultured crenarchaeote	E-value = 9.00E-70	Identity = 54.55%
	4	gi 119896721 ref YP_931934.1	Azoarcus sp. BH72	E-value = 3.00E-68	Identity = 56.93%
	5	gi 71908527 ref YP_286114.1	Dechloromonas aromatica RCB	E-value = 4.00E-67	Identity = 51.71%
AB2161	1	<i>cysD</i> gi 78776358 ref YP_392673.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-156	Identity = 88.45%

	2		gi 71280683 ref YP_268867.1	Colwellia psychrerythraea 34H	E-value = 2.00E-145	Identity = 83.16%
	3		gi 90021790 ref YP_527617.1	Saccharophagus degradans 2-40	E-value = 1.00E-141	Identity = 80.53%
	4		gi 145300398 ref YP_001143239.1	Aeromonas salmonicida subsp. salmonicida A449	E-value = 3.00E-141	Identity = 77.81%
	5		gi 117619880 ref YP_858037.1	Aeromonas hydrophila subsp. hydrophila ATCC 7966	E-value = 6.00E-141	Identity = 78.60%
AB2162	1	cysNC	gi 78776359 ref YP_392674.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 79.36%
	2		gi 88795785 ref ZP_01111476.1	Alteromonas macleodii 'Deep ecotype'	E-value = 9.00E-167	Identity = 63.33%
	3		gi 119944561 ref YP_942241.1	Psychromonas ingrahamii 37	E-value = 3.00E-165	Identity = 63.46%
	4		gi 86147231 ref ZP_01065546.1	Vibrio sp. MED222	E-value = 3.00E-164	Identity = 62.55%
	5		gi 120555646 ref YP_959997.1	Marinobacter aquaeolei VT8	E-value = 5.00E-164	Identity = 63.17%
AB2163	1	cysI	gi 113474849 ref YP_720910.1	Trichodesmium erythraeum IMS101	E-value = 1.00E-26	Identity = 27.08%
	2		gi 119485484 ref ZP_01619812.1	Lyngbya sp. PCC 8106	E-value = 1.00E-24	Identity = 25.71%
	3		gi 119510725 ref ZP_01629852.1	Nodularia spumigena CCY9414	E-value = 2.00E-23	Identity = 25.06%
AB2164	1		gi 119720108 ref YP_920603.1	Thermofilum pendens Hrk 5	E-value = 6.00E-22	Identity = 25.71%
AB2165	1		gi 78776361 ref YP_392676.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-158	Identity = 62.65%
	2		gi 34557558 ref NP_907373.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-130	Identity = 52.91%
	3		gi 157164870 ref YP_001467243.1	Campylobacter concisus 13826	E-value = 4.00E-123	Identity = 52.28%
	4		gi 118474484 ref YP_892393.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-119	Identity = 53.10%
	5		gi 57505524 ref ZP_00371451.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-117	Identity = 48.94%
AB2166	1			*** No matches found ***		
AB2167	1			*** No matches found ***		
AB2168	1	cobS	gi 42527884 ref NP_972982.1	Treponema denticola ATCC 35405	E-value = 3.00E-10	Identity = 29.41%
	2		gi 118728569 ref ZP_01577086.1	Delftia acidovorans SPH-1	E-value = 7.00E-09	Identity = 25.94%
	3		gi 78776312 ref YP_392627.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-07	Identity = 25.20%
	4		gi 110800171 ref YP_695737.1	Clostridium perfringens ATCC 13124	E-value = 4.00E-06	Identity = 27.95%
	5		gi 110801834 ref YP_698432.1	Clostridium perfringens SM101	E-value = 5.00E-06	Identity = 28.35%
AB2169	1	cobP	gi 153876063 ref ZP_02003574.1	Beggiatoa sp. PS	E-value = 1.00E-24	Identity = 37.13%
	2		gi 78776313 ref YP_392628.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-21	Identity = 37.95%
	3		gi 78044997 ref YP_359622.1	Carboxydotherrmus hydrogenoformans Z-2901	E-value = 3.00E-20	Identity = 36.09%
	4		gi 90022846 ref YP_528673.1	Saccharophagus degradans 2-40	E-value = 9.00E-19	Identity = 35.12%
	5		gi 119476237 ref ZP_01616588.1	marine gamma proteobacterium HTCC2143	E-value = 1.00E-18	Identity = 32.12%
AB2170	1		gi 157370509 ref YP_001478498.1	Serratia proteamaculans 568	E-value = 1.00E-24	Identity = 39.78%
	2		gi 153954249 ref YP_001395014.1	Clostridium kluyveri DSM 555	E-value = 5.00E-24	Identity = 37.32%
	3		gi 68055681 ref ZP_00539824.1	Exiguobacterium sibiricum 255-15	E-value = 6.00E-21	Identity = 34.16%
	4		gi 53713020 ref YP_099012.1	Bacteroides fragilis YCH46	E-value = 6.00E-20	Identity = 34.90%
	5		gi 149369901 ref ZP_01889752.1	unidentified eubacterium SCB49	E-value = 6.00E-20	Identity = 36.73%
AB2171	1		gi 78776308 ref YP_392623.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-81	Identity = 52.99%
	2		gi 15898988 ref NP_343593.1	Sulfolobus solfataricus P2	E-value = 1.00E-43	Identity = 34.88%
	3		gi 15679425 ref NP_276542.1	Methanothermobacter thermautotrophicus str. Delta H	E-value = 3.00E-42	Identity = 32.41%
	4		gi 147921629 ref YP_684554.1	uncultured methanogenic archaeon RC-I	E-value = 4.00E-42	Identity = 33.43%
	5		gi 15922470 ref NP_378139.1	Sulfolobus tokodaii str. 7	E-value = 4.00E-40	Identity = 33.62%
AB2172	1		gi 146312205 ref YP_001177279.1	Enterobacter sp. 638	E-value = 4.00E-103	Identity = 47.37%
	2		gi 152970099 ref YP_001335208.1	Klebsiella pneumoniae subsp. pneumoniae MGH 78578	E-value = 2.00E-101	Identity = 48.82%
	3		gi 108562566 ref YP_626882.1	Helicobacter pylori HPAG1	E-value = 4.00E-100	Identity = 45.30%
	4		gi 15803605 ref NP_289638.1	Escherichia coli O157:H7 EDL933	E-value = 5.00E-99	Identity = 46.27%
	5		gi 74313598 ref YP_312017.1	Shigella sonnei Ss046	E-value = 6.00E-99	Identity = 46.27%
AB2173	1		gi 114320249 ref YP_741932.1	Alkalilimnicola ehrlichei MLHE-1	E-value = 2.00E-28	Identity = 31.84%
	2		gi 154148756 ref YP_001406972.1	Campylobacter hominis ATCC BAA-381	E-value = 9.00E-20	Identity = 37.92%
	3		gi 93006941 ref YP_581378.1	Psychrobacter cryohalolentis K5	E-value = 9.00E-18	Identity = 30.58%
	4		gi 71066387 ref YP_265114.1	Psychrobacter arcticus 273-4	E-value = 1.00E-16	Identity = 28.63%

	5	gi 15676362 ref NP_273498.1	Neisseria meningitidis MC58	E-value = 9.00E-14	Identity = 29.55%
AB2174	1	gi 152990860 ref YP_001356582.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-152	Identity = 47.39%
	2	gi 78777096 ref YP_393411.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-132	Identity = 47.00%
	3	gi 78484791 ref YP_390716.1	Thiomicrospira crunogena XCL-2	E-value = 3.00E-129	Identity = 44.92%
	4	gi 118475366 ref YP_892248.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-128	Identity = 45.89%
	5	gi 152993441 ref YP_001359162.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-128	Identity = 44.76%
AB2175	1	gi 78777884 ref YP_394199.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-135	Identity = 81.61%
	2	gi 27367252 ref NP_762779.1	Vibrio vulnificus CMCP6	E-value = 1.00E-94	Identity = 60.00%
	3	gi 90021677 ref YP_527504.1	Saccharophagus degradans 2-40	E-value = 6.00E-94	Identity = 58.33%
	4	gi 88799473 ref ZP_01115050.1	Reinekea sp. MED297	E-value = 7.00E-94	Identity = 58.00%
	5	gi 91228093 ref ZP_01262135.1	Vibrio alginolyticus 12G01	E-value = 2.00E-93	Identity = 58.67%
AB2176	1	gi 78777883 ref YP_394198.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-48	Identity = 73.19%
	2	gi 89889991 ref ZP_01201502.1	Flavobacteria bacterium BBFL7	E-value = 7.00E-24	Identity = 44.27%
	3	gi 86131051 ref ZP_01049650.1	Cellulophaga sp. MED134	E-value = 4.00E-23	Identity = 41.41%
	4	gi 86143736 ref ZP_01062112.1	Flavobacterium sp. MED217	E-value = 7.00E-22	Identity = 44.80%
	5	gi 149369505 ref ZP_01889357.1	unidentified eubacterium SCB49	E-value = 2.00E-21	Identity = 45.80%
AB2177	1	gi 118475767 ref YP_891994.1	Campylobacter fetus subsp. fetus 82-40	E-value = 8.00E-10	Identity = 53.85%
	2	gi 149194742 ref ZP_01871837.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-09	Identity = 52.31%
	3	gi 57241280 ref ZP_00369227.1	Campylobacter lari RM2100	E-value = 3.00E-09	Identity = 51.47%
	4	gi 152993403 ref YP_001359124.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-07	Identity = 46.48%
	5	gi 78777335 ref YP_393650.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-07	Identity = 50.82%
AB2178	1	gi 34557353 ref NP_907168.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-57	Identity = 35.31%
	2	gi 85711301 ref ZP_01042360.1	Idiomarina baltica OS145	E-value = 8.00E-53	Identity = 33.17%
	3	gi 78777182 ref YP_393497.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-50	Identity = 32.86%
	4	gi 56460645 ref YP_155926.1	Idiomarina loihiensis L2TR	E-value = 2.00E-49	Identity = 31.18%
	5	gi 34557884 ref NP_907699.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-49	Identity = 33.74%
AB2179	1	gi 152990549 ref YP_001356271.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-69	Identity = 51.13%
	2	gi 78777231 ref YP_393546.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-69	Identity = 50.37%
	3	gi 152992672 ref YP_001358393.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-69	Identity = 49.44%
	4	gi 157164361 ref YP_001466430.1	Campylobacter concisus 13826	E-value = 2.00E-59	Identity = 47.76%
	5	gi 154174301 ref YP_001407929.1	Campylobacter curvus 525.92	E-value = 8.00E-57	Identity = 44.66%
AB2180	1	gi 152991823 ref YP_001357544.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-09	Identity = 51.61%
AB2181	1	gi 134093493 ref YP_001098568.1	Herminiimonas arsenicoxydans	E-value = 4.00E-76	Identity = 41.43%
	2	gi 152979795 ref YP_001351929.1	Janthinobacterium sp. Marseille	E-value = 4.00E-75	Identity = 40.29%
	3	gi 95928224 ref ZP_01310972.1	Desulfuromonas acetoxidans DSM 684	E-value = 1.00E-74	Identity = 40.97%
	4	gi 114777321 ref ZP_01452332.1	Mariiprofundus ferrooxydans PV-1	E-value = 2.00E-74	Identity = 37.87%
	5	gi 82703561 ref YP_413127.1	Nitrosospira multiformis ATCC 25196	E-value = 2.00E-74	Identity = 41.30%
AB2182	1	gi 78777841 ref YP_394156.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 75.83%
	2	gi 34556917 ref NP_906732.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 73.69%
	3	gi 152990865 ref YP_001356587.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 71.79%
	4	gi 32266162 ref NP_860194.1	Helicobacter hepaticus ATCC 51449	E-value = 0	Identity = 72.61%
	5	gi 154175431 ref YP_001408036.1	Campylobacter curvus 525.92	E-value = 0	Identity = 72.58%
AB2183	1	gi 154174607 ref YP_001408034.1	Campylobacter curvus 525.92	E-value = 9.00E-32	Identity = 48.11%
	2	gi 157165150 ref YP_001467124.1	Campylobacter concisus 13826	E-value = 2.00E-30	Identity = 49.73%
	3	gi 78777840 ref YP_394155.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-30	Identity = 51.35%
	4	gi 34556918 ref NP_906733.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-29	Identity = 48.60%
	5	gi 32266163 ref NP_860195.1	Helicobacter hepaticus ATCC 51449	E-value = 5.00E-25	Identity = 44.19%
AB2184	1	gi 34556919 ref NP_906734.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-38	Identity = 35.63%
	2	gi 109947965 ref YP_665193.1	Helicobacter acinonychis str. Sheeba	E-value = 4.00E-33	Identity = 33.59%

	3	gi 32266164 ref NP_860196.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-32	Identity = 35.69%
	4	gi 15611173 ref NP_222824.1	Helicobacter pylori J99	E-value = 8.00E-32	Identity = 31.82%
	5	gi 108562536 ref YP_626852.1	Helicobacter pylori HPAG1	E-value = 7.00E-31	Identity = 31.06%
AB2185	1	gi 109897405 ref YP_660660.1	Pseudoalteromonas atlantica T6c	E-value = 3.00E-23	Identity = 36.76%
	2	gi 154174597 ref YP_001408656.1	Campylobacter curvus 525.92	E-value = 9.00E-22	Identity = 38.73%
	3	gi 83646649 ref YP_435084.1	Hahella chejuensis KCTC 2396	E-value = 1.00E-21	Identity = 34.55%
	4	gi 146306840 ref YP_001187305.1	Pseudomonas mendocina ymp	E-value = 2.00E-21	Identity = 37.21%
	5	gi 78484554 ref YP_390479.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-20	Identity = 35.85%
AB2186	1	truA gi 78777192 ref YP_393507.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-49	Identity = 46.06%
	2	gi 152990852 ref YP_001356574.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-48	Identity = 41.91%
	3	gi 152993424 ref YP_001359145.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-47	Identity = 43.98%
	4	gi 32266100 ref NP_860132.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-41	Identity = 39.51%
	5	gi 57240386 ref ZP_00368335.1	Campylobacter lari RM2100	E-value = 2.00E-39	Identity = 38.75%
AB2187	1	gi 78777193 ref YP_393508.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-49	Identity = 35.31%
	2	gi 32266101 ref NP_860133.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-48	Identity = 35.69%
	3	gi 109947019 ref YP_664247.1	Helicobacter acinonychis str. Sheeba	E-value = 5.00E-46	Identity = 34.40%
	4	gi 34557088 ref NP_906903.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-45	Identity = 35.10%
	5	gi 15644990 ref NP_207160.1	Helicobacter pylori 26695	E-value = 5.00E-45	Identity = 33.62%
AB2188	1		*** No matches found ***		
AB2189	1	uppS gi 34558343 ref NP_908158.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-77	Identity = 63.64%
	2	gi 78777195 ref YP_393510.1	Sulfuromonas denitrificans ATCC 33889	E-value = 7.00E-73	Identity = 64.25%
	3	gi 152990849 ref YP_001356571.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-72	Identity = 60.99%
	4	gi 149193962 ref ZP_01871060.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-72	Identity = 65.16%
	5	gi 32266592 ref NP_860624.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-68	Identity = 55.17%
AB2190	1	dfp gi 78777196 ref YP_393511.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-117	Identity = 55.26%
	2	gi 152990848 ref YP_001356570.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-98	Identity = 49.76%
	3	gi 152993420 ref YP_001359141.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-97	Identity = 48.07%
	4	gi 34558345 ref NP_908160.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-89	Identity = 44.78%
	5	gi 149193960 ref ZP_01871058.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-82	Identity = 48.66%
AB2191	1	glmU gi 34558373 ref NP_908188.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-153	Identity = 64.49%
	2	gi 152990847 ref YP_001356569.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-141	Identity = 60.61%
	3	gi 152993419 ref YP_001359140.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-139	Identity = 59.48%
	4	gi 78777212 ref YP_393527.1	Sulfuromonas denitrificans ATCC 33889	E-value = 5.00E-135	Identity = 58.14%
	5	gi 149193959 ref ZP_01871057.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-128	Identity = 60.72%
AB2192	1	gi 123417454 ref XP_001305115.1	Trichomonas vaginalis G3	E-value = 3.00E-43	Identity = 28.49%
	2	gi 154419616 ref XP_001582824.1	Trichomonas vaginalis G3	E-value = 4.00E-37	Identity = 27.13%
	3	gi 123425100 ref XP_001306730.1	Trichomonas vaginalis G3	E-value = 8.00E-35	Identity = 26.24%
	4	gi 154417199 ref XP_001581620.1	Trichomonas vaginalis G3	E-value = 1.00E-34	Identity = 27.10%
	5	gi 123425100 ref XP_001306730.1	Trichomonas vaginalis G3	E-value = 3.00E-34	Identity = 25.61%
AB2193	1	gi 46203070 ref ZP_00052136.2	Magnetospirillum magnetotacticum MS-1	E-value = 3.00E-88	Identity = 41.23%
	2	gi 34497544 ref NP_901759.1	Chromobacterium violaceum ATCC 12472	E-value = 1.00E-78	Identity = 38.77%
	3	gi 116061803 emb CAL52521.1	Ostreococcus tauri	E-value = 2.00E-68	Identity = 34.15%
	4	gi 30682998 ref NP_193215.2	Arabidopsis thaliana	E-value = 5.00E-67	Identity = 34.71%
	5	gi 110739278 dbj BAF01552.1	Arabidopsis thaliana	E-value = 1.00E-66	Identity = 34.50%
AB2194	1	trmA gi 78777216 ref YP_393531.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-100	Identity = 50.13%
	2	gi 152993415 ref YP_001359136.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-95	Identity = 48.53%
	3	gi 152990451 ref YP_001356173.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-95	Identity = 47.72%
	4	gi 146305866 ref YP_001186331.1	Pseudomonas mendocina ymp	E-value = 3.00E-87	Identity = 43.80%
	5	gi 104783723 ref YP_610221.1	Pseudomonas entomophila L48	E-value = 5.00E-87	Identity = 44.97%

Accession	Gene	RefSeq ID	Organism	E-value	Identity
AB2195	1		<b>*** No matches found ***</b>		
AB2199	1	<i>gidA</i> gi 149194011 ref ZP_01871109.1	Caminibacter mediatlanticus TB-2	E-value = 0	Identity = 63.96%
	2	gi 57168067 ref ZP_00367206.1	Campylobacter coli RM2228	E-value = 0	Identity = 62.29%
	3	gi 157164575 ref YP_001466158.1	Campylobacter concisus 13826	E-value = 0	Identity = 65.21%
	4	gi 154175126 ref YP_001407617.1	Campylobacter curvus 525.92	E-value = 0	Identity = 63.80%
	5	gi 118475109 ref YP_892585.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 64.26%
AB2200	1	<i>ribE</i> gi 78778124 ref YP_394439.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-75	Identity = 67.00%
	2	gi 152991330 ref YP_001357052.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-68	Identity = 61.08%
	3	gi 152991801 ref YP_001357522.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-64	Identity = 57.56%
	4	gi 34558359 ref NP_908174.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-64	Identity = 57.64%
	5	gi 157415481 ref YP_001482737.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-63	Identity = 56.65%
AB2201	1	<i>mreC</i> gi 34556510 ref NP_906325.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-36	Identity = 39.17%
	2	gi 57168397 ref ZP_00367531.1	Campylobacter coli RM2228	E-value = 1.00E-34	Identity = 38.83%
	3	gi 153952050 ref YP_001398674.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 3.00E-32	Identity = 34.25%
	4	gi 157414574 ref YP_001481830.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-32	Identity = 33.86%
	5	gi 86153780 ref ZP_01071983.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 4.00E-32	Identity = 34.54%
AB2202	1	<i>mreB</i> gi 34556511 ref NP_906326.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-125	Identity = 70.50%
	2	gi 78777662 ref YP_393977.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-124	Identity = 71.09%
	3	gi 152990292 ref YP_001356014.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-123	Identity = 69.10%
	4	gi 154174308 ref YP_001407542.1	Campylobacter curvus 525.92	E-value = 4.00E-122	Identity = 68.51%
	5	gi 57241407 ref ZP_00369353.1	Campylobacter lari RM2100	E-value = 2.00E-121	Identity = 69.82%
AB2203	1	<i>clpX</i> gi 152990291 ref YP_001356013.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-149	Identity = 68.24%
	2	gi 154174197 ref YP_001407541.1	Campylobacter curvus 525.92	E-value = 1.00E-146	Identity = 64.68%
	3	gi 157165299 ref YP_001467559.1	Campylobacter concisus 13826	E-value = 1.00E-144	Identity = 64.43%
	4	gi 154148896 ref YP_001406902.1	Campylobacter hominis ATCC BAA-381	E-value = 5.00E-142	Identity = 64.55%
	5	gi 152992701 ref YP_001358422.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-140	Identity = 63.34%
AB2204	1	<i>lpxA</i> gi 152992702 ref YP_001358423.1	Sulfurovum sp. NBC37-1	E-value = 6.00E-96	Identity = 67.31%
	2	gi 149194749 ref ZP_01871844.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-91	Identity = 69.39%
	3	gi 78777660 ref YP_393975.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-91	Identity = 66.54%
	4	gi 152990290 ref YP_001356012.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-79	Identity = 61.02%
	5	gi 34556513 ref NP_906328.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-75	Identity = 54.41%
AB2205	1	<i>fabZ</i> gi 152990289 ref YP_001356011.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-54	Identity = 68.92%
	2	gi 86149614 ref ZP_01067844.1	Campylobacter jejuni subsp. jejuni CF93-6	E-value = 4.00E-52	Identity = 68.24%
	3	gi 154175396 ref YP_001407539.1	Campylobacter curvus 525.92	E-value = 9.00E-52	Identity = 65.54%
	4	gi 15791644 ref NP_281467.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-51	Identity = 68.24%
	5	gi 57505538 ref ZP_00371465.1	Campylobacter upsaliensis RM3195	E-value = 2.00E-51	Identity = 68.71%
AB2206	1	<i>lpxB</i> gi 78777101 ref YP_393416.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-106	Identity = 59.65%
	2	gi 152991057 ref YP_001356779.1	Nitratiruptor sp. SB155-2	E-value = 5.00E-105	Identity = 52.89%
	3	gi 152992705 ref YP_001358426.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-99	Identity = 55.75%
	4	gi 34557196 ref NP_907011.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-94	Identity = 49.86%
	5	gi 154148546 ref YP_001406862.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-87	Identity = 48.99%
AB2207	1	<i>ndh</i> gi 152992704 ref YP_001358425.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-106	Identity = 51.82%
	2	gi 78777658 ref YP_393973.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-106	Identity = 52.51%
	3	gi 152990288 ref YP_001356010.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-105	Identity = 53.78%
	4	gi 149194747 ref ZP_01871842.1	Caminibacter mediatlanticus TB-2	E-value = 6.00E-86	Identity = 46.50%
	5	gi 57168392 ref ZP_00367526.1	Campylobacter coli RM2228	E-value = 5.00E-82	Identity = 46.69%
AB2208	1	<i>ndh</i> gi 152993826 ref YP_001359547.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-07	Identity = 26.45%
AB2209	1	<i>ndh</i> gi 78777411 ref YP_393726.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-64	Identity = 38.68%
	2	gi 152990716 ref YP_001356438.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-50	Identity = 34.63%

	3	gi 15805974 ref NP_294674.1	Deinococcus radiodurans R1	E-value = 7.00E-29	Identity = 27.98%
	4	gi 90410170 ref ZP_01218187.1	Photobacterium profundum 3TCK	E-value = 1.00E-28	Identity = 25.32%
	5	gi 42521954 ref NP_967334.1	Bdellovibrio bacteriovorus HD100	E-value = 3.00E-28	Identity = 27.06%
AB2210	1	nfo gi 78778029 ref YP_394344.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-129	Identity = 78.42%
	2	gi 152993825 ref YP_001359546.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-116	Identity = 69.15%
	3	gi 152990035 ref YP_001355757.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-114	Identity = 71.33%
	4	gi 117925233 ref YP_865850.1	Magnetococcus sp. MC-1	E-value = 8.00E-110	Identity = 64.13%
	5	gi 34558061 ref NP_907876.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-106	Identity = 65.59%
AB2211	1	gi 39997789 ref NP_953740.1	Geobacter sulfurreducens PCA	E-value = 1.00E-92	Identity = 41.45%
	2	gi 17549038 ref NP_522378.1	Ralstonia solanacearum GMI1000	E-value = 3.00E-92	Identity = 45.54%
	3	gi 83748930 ref ZP_00945940.1	Ralstonia solanacearum UW551	E-value = 1.00E-90	Identity = 41.28%
	4	gi 146284250 ref YP_001174403.1	Pseudomonas stutzeri A1501	E-value = 2.00E-90	Identity = 40.63%
	5	gi 56476525 ref YP_158114.1	Azoarcus sp. EbN1	E-value = 6.00E-90	Identity = 42.82%
AB2212	1	gi 51594844 ref YP_069035.1	Yersinia pseudotuberculosis IP 32953	E-value = 0	Identity = 56.22%
	2	gi 153948753 ref YP_001402539.1	Yersinia pseudotuberculosis IP 31758	E-value = 0	Identity = 56.22%
	3	gi 16123628 ref NP_406941.1	Yersinia pestis CO92	E-value = 0	Identity = 56.22%
	4	gi 123440823 ref YP_001004814.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 0	Identity = 56.41%
	5	gi 152995028 ref YP_001339863.1	Marinomonas sp. MWYL1	E-value = 0	Identity = 56.68%
AB2213	1	gi 109900099 ref YP_663354.1	Pseudoalteromonas atlantica T6c	E-value = 3.00E-75	Identity = 43.99%
	2	gi 123440822 ref YP_001004813.1	Yersinia enterocolitica subsp. enterocolitica 8081	E-value = 1.00E-73	Identity = 43.09%
	3	gi 16123629 ref NP_406942.1	Yersinia pestis CO92	E-value = 6.00E-73	Identity = 42.97%
	4	gi 153947901 ref YP_001402540.1	Yersinia pseudotuberculosis IP 31758	E-value = 6.00E-73	Identity = 42.70%
	5	gi 120601547 ref YP_965947.1	Desulfovibrio vulgaris subsp. vulgaris DP4	E-value = 2.00E-71	Identity = 43.58%
AB2214	1	gi 157370926 ref YP_001478915.1	Serratia proteamaculans 568	E-value = 2.00E-22	Identity = 30.73%
	2	gi 84321967 ref ZP_00970317.1	Pseudomonas aeruginosa C3719	E-value = 1.00E-20	Identity = 29.05%
	3	gi 152987615 ref YP_001349461.1	Pseudomonas aeruginosa PA7	E-value = 2.00E-20	Identity = 29.05%
	4	gi 107100734 ref ZP_01364652.1	Pseudomonas aeruginosa PACS2	E-value = 2.00E-20	Identity = 29.05%
	5	gi 15596480 ref NP_249974.1	Pseudomonas aeruginosa PAO1	E-value = 2.00E-20	Identity = 29.05%
AB2215	1	gi 104782149 ref YP_608647.1	Pseudomonas entomophila L48	E-value = 2.00E-62	Identity = 43.49%
	2	gi 126359256 ref ZP_01716251.1	Pseudomonas putida GB-1	E-value = 2.00E-62	Identity = 39.79%
	3	gi 148256052 ref YP_001240637.1	Bradyrhizobium sp. BTAi1	E-value = 6.00E-58	Identity = 37.83%
	4	gi 146300602 ref YP_001195193.1	Flavobacterium johnsoniae UW101	E-value = 6.00E-42	Identity = 30.16%
	5	gi 77918706 ref YP_356521.1	Pelobacter carbinolicus DSM 2380	E-value = 5.00E-41	Identity = 30.86%
AB2216	1	gi 88812623 ref ZP_01127870.1	Nitrococcus mobilis Nb-231	E-value = 4.00E-134	Identity = 51.25%
	2	gi 127511431 ref YP_001092628.1	Shewanella loihica PV-4	E-value = 1.00E-132	Identity = 55.38%
	3	gi 114776863 ref ZP_01451906.1	Mariprofundus ferrooxydans PV-1	E-value = 3.00E-132	Identity = 54.61%
	4	gi 146281486 ref YP_001171639.1	Pseudomonas stutzeri A1501	E-value = 1.00E-116	Identity = 46.54%
	5	gi 90581661 ref ZP_01237450.1	Vibrio angustum S14	E-value = 6.00E-116	Identity = 47.63%
AB2217	1		*** No matches found ***		
AB2218	1		*** No matches found ***		
AB2219	1		*** No matches found ***		
AB2220	1	gi 152990036 ref YP_001355758.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 58.75%
	2	gi 78778027 ref YP_394342.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-177	Identity = 57.71%
	3	gi 34557975 ref NP_907790.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-175	Identity = 60.55%
	4	gi 152993812 ref YP_001359533.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-175	Identity = 56.77%
	5	gi 32265973 ref NP_860005.1	Helicobacter hepaticus ATCC 51449	E-value = 8.00E-161	Identity = 55.29%
AB2221	1	gi 32267097 ref NP_861129.1	Helicobacter hepaticus ATCC 51449	E-value = 4.00E-15	Identity = 29.05%
	2	gi 154148054 ref YP_001405794.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-11	Identity = 34.11%
	3	gi 57241364 ref ZP_00369310.1	Campylobacter lari RM2100	E-value = 4.00E-10	Identity = 31.12%

	4	gi 57168321 ref ZP_00367455.1	Campylobacter coli RM2228	E-value = 4.00E-09	Identity = 29.46%
	5	gi 149194369 ref ZP_01871466.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-08	Identity = 29.05%
AB2222	1	gi 154148760 ref YP_001405942.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-106	Identity = 67.01%
	2	gi 118474559 ref YP_891407.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-105	Identity = 66.43%
	3	gi 78778198 ref YP_394513.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-105	Identity = 69.15%
	4	gi 34557829 ref NP_907644.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-103	Identity = 66.08%
	5	gi 152991400 ref YP_001357122.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-103	Identity = 69.15%
AB2223	1	<i>murB</i> gi 152991402 ref YP_001357124.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-67	Identity = 50.20%
	2	gi 152991676 ref YP_001357397.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-63	Identity = 49.61%
	3	gi 78778200 ref YP_394515.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-59	Identity = 49.02%
	4	gi 32265938 ref NP_859970.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-59	Identity = 45.35%
	5	gi 154174461 ref YP_001409020.1	Campylobacter curvus 525.92	E-value = 1.00E-58	Identity = 47.27%
AB2224	1	<i>topA</i> gi 114321779 ref YP_743462.1	Alkalilimnicola ehrlichei MLHE-1	E-value = 0	Identity = 47.15%
	2	gi 88811388 ref ZP_01126643.1	Nitrococcus mobilis Nb-231	E-value = 1.00E-178	Identity = 47.97%
	3	gi 77166457 ref YP_344982.1	Nitrosococcus oceani ATCC 19707	E-value = 6.00E-176	Identity = 46.11%
	4	gi 121999104 ref YP_001003891.1	Halorhodospira halophila SL1	E-value = 2.00E-174	Identity = 45.63%
	5	gi 28199638 ref NP_779952.1	Xylella fastidiosa Temecula1	E-value = 2.00E-173	Identity = 46.16%
AB2225	1	gi 78776371 ref YP_392686.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-39	Identity = 44.71%
	2	gi 149194968 ref ZP_01872061.1	Caminibacter mediatlanticus TB-2	E-value = 4.00E-37	Identity = 47.24%
	3	gi 154174120 ref YP_001408975.1	Campylobacter curvus 525.92	E-value = 3.00E-32	Identity = 42.01%
	4	gi 152991393 ref YP_001357115.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-31	Identity = 44.24%
	5	gi 154149295 ref YP_001407081.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-27	Identity = 44.37%
AB2226	1	<i>bioB</i> gi 152991394 ref YP_001357116.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-100	Identity = 64.03%
	2	gi 78776370 ref YP_392685.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-94	Identity = 57.97%
	3	gi 153951861 ref YP_001398962.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-91	Identity = 56.68%
	4	gi 157415900 ref YP_001483156.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 5.00E-91	Identity = 56.68%
	5	gi 86152694 ref ZP_01070899.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 5.00E-91	Identity = 56.68%
AB2227	1		*** No matches found ***		
AB2228	1	gi 34557832 ref NP_907647.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-06	Identity = 42.86%
AB2229	1	<i>eno</i> gi 152991679 ref YP_001357400.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 78.12%
	2	gi 78778195 ref YP_394510.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-180	Identity = 76.60%
	3	gi 34557831 ref NP_907646.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-177	Identity = 72.81%
	4	gi 152991398 ref YP_001357120.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-173	Identity = 73.29%
	5	gi 32266130 ref NP_860162.1	Helicobacter hepaticus ATCC 51449	E-value = 2.00E-167	Identity = 70.42%
AB2230	1	<i>recA</i> gi 78778196 ref YP_394511.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-142	Identity = 75.57%
	2	gi 157164266 ref YP_001467588.1	Campylobacter concisus 13826	E-value = 1.00E-139	Identity = 76.32%
	3	gi 154173783 ref YP_001409018.1	Campylobacter curvus 525.92	E-value = 1.00E-138	Identity = 75.37%
	4	gi 152991399 ref YP_001357121.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-138	Identity = 74.55%
	5	gi 634052 emb CAA84615.1	Helicobacter pylori	E-value = 9.00E-138	Identity = 76.35%
AB2231	1		*** No matches found ***		
AB2232	1	<i>pseB</i> gi 154174107 ref YP_001408963.1	Campylobacter curvus 525.92	E-value = 6.00E-144	Identity = 75.30%
	2	gi 86152657 ref ZP_01070862.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 9.00E-142	Identity = 74.70%
	3	gi 37731984 gb AAO73065.1	Campylobacter coli	E-value = 2.00E-141	Identity = 74.70%
	4	gi 153951236 ref YP_001397620.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 3.00E-141	Identity = 74.70%
	5	gi 157415556 ref YP_001482812.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 4.00E-141	Identity = 74.09%
AB2233	1	gi 149194656 ref ZP_01871751.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-103	Identity = 57.92%
	2	gi 125974706 ref YP_001038616.1	Clostridium thermocellum ATCC 27405	E-value = 8.00E-90	Identity = 46.44%
	3	gi 148643596 ref YP_001274109.1	Methanobrevibacter smithii ATCC 35061	E-value = 4.00E-89	Identity = 45.93%
	4	gi 71065220 ref YP_263947.1	Psychrobacter arcticus 273-4	E-value = 7.00E-89	Identity = 42.75%



AB2234	5	gi 75761581 ref ZP_00741536.1	Bacillus thuringiensis serovar israelensis ATCC 35646	E-value = 4.00E-87	Identity = 46.05%
	1	gi 88604322 ref YP_504500.1	Methanospirillum hungatei JF-1	E-value = 2.00E-71	Identity = 58.48%
	2	gi 71065222 ref YP_263949.1	Psychrobacter arcticus 273-4	E-value = 2.00E-71	Identity = 57.78%
	3	gi 114321471 ref YP_743154.1	Alkalilimnicola ehrlichei MLHE-1	E-value = 8.00E-70	Identity = 56.58%
	4	gi 109899383 ref YP_662638.1	Pseudoalteromonas atlantica T6c	E-value = 1.00E-68	Identity = 60.70%
	5	gi 54309869 ref YP_130889.1	Photobacterium profundum SS9	E-value = 2.00E-67	Identity = 55.70%
AB2235	1	gi 154173860 ref YP_001408968.1	Campylobacter curvus 525.92	E-value = 2.00E-114	Identity = 61.29%
	2	gi 120436362 ref YP_862048.1	Gramella forsetii KT0803	E-value = 2.00E-113	Identity = 59.76%
	3	gi 106895373 ref ZP_01362470.1	Clostridium sp. OhLAs	E-value = 3.00E-112	Identity = 60.82%
	4	gi 149194662 ref ZP_01871757.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-111	Identity = 61.36%
	5	gi 34558392 ref NP_908207.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-108	Identity = 58.28%
AB2236	1	gi 125974707 ref YP_001038617.1	Clostridium thermocellum ATCC 27405	E-value = 3.00E-21	Identity = 26.99%
	2	gi 114565781 ref YP_752935.1	Syntrophomonas wolfei subsp. wolfei str. Goettingen	E-value = 4.00E-18	Identity = 27.78%
	3	gi 15895455 ref NP_348804.1	Clostridium acetobutylicum ATCC 824	E-value = 4.00E-17	Identity = 27.38%
	4	gi 118444536 ref YP_877963.1	Clostridium novyi NT	E-value = 2.00E-15	Identity = 30.22%
	5	gi 148380657 ref YP_001255198.1	Clostridium botulinum A str. ATCC 3502	E-value = 3.00E-15	Identity = 31.47%
AB2237	1	gi 156860273 gb EDO53704.1	Bacteroides uniformis ATCC 8492	E-value = 1.00E-43	Identity = 34.49%
AB2238	1	gi 86151123 ref ZP_01069339.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 4.00E-28	Identity = 38.57%
	2	gi 153951192 ref YP_001397602.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 5.00E-28	Identity = 38.12%
	3	gi 153952545 ref YP_001397603.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 2.00E-24	Identity = 37.44%
	4	gi 86151072 ref ZP_01069288.1	Campylobacter jejuni subsp. jejuni 260.94	E-value = 2.00E-24	Identity = 37.62%
	5	gi 16127088 ref NP_421652.1	Caulobacter crescentus CB15	E-value = 5.00E-24	Identity = 34.40%
AB2239	1	gi 28211360 ref NP_782304.1	Clostridium tetani E88	E-value = 4.00E-39	Identity = 33.99%
	2	gi 156860272 gb EDO53703.1	Bacteroides uniformis ATCC 8492	E-value = 1.00E-30	Identity = 31.56%
	3	gi 29348783 ref NP_812286.1	Bacteroides thetaiotaomicron VPI-5482	E-value = 7.00E-28	Identity = 25.65%
	4	gi 120555506 ref YP_959857.1	Marinobacter aquaeolei VT8	E-value = 7.00E-27	Identity = 26.76%
	5	gi 114046894 ref YP_737444.1	Shewanella sp. MR-7	E-value = 4.00E-25	Identity = 27.91%
AB2240	1	gi 120598212 ref YP_962786.1	Shewanella sp. W3-18-1	E-value = 1.00E-16	Identity = 28.67%
	2	gi 146293714 ref YP_001184138.1	Shewanella putrefaciens CN-32	E-value = 2.00E-16	Identity = 28.67%
AB2241	1	gi 126652462 ref ZP_01724634.1	Bacillus sp. B14905	E-value = 3.00E-27	Identity = 38.03%
	2	gi 84488889 ref YP_447121.1	Methanosphaera stadmanae DSM 3091	E-value = 6.00E-14	Identity = 28.91%
AB2242	1	gi 78776375 ref YP_392690.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-42	Identity = 27.10%
AB2243	1	gi 2506429 sp P21989 FLA2_TREPH	Treponema phagedenis	E-value = 8.00E-26	Identity = 30.29%
	2	gi 89210132 ref ZP_01188524.1	Halothermothrix orenii H 168	E-value = 9.00E-26	Identity = 32.68%
	3	gi 74273842 gb ABA01569.1	Aeromonas hydrophila	E-value = 1.00E-25	Identity = 33.75%
	4	gi 15214031 sp Q9KWX0 FLAB2_TREMA	Treponema maltophilum	E-value = 2.00E-25	Identity = 28.80%
	5	gi 15639779 ref NP_219229.1	Treponema pallidum subsp. pallidum str. Nichols	E-value = 2.00E-25	Identity = 28.99%
AB2244	1	gi 89210132 ref ZP_01188524.1	Halothermothrix orenii H 168	E-value = 3.00E-26	Identity = 33.01%
	2	gi 2506429 sp P21989 FLA2_TREPH	Treponema phagedenis	E-value = 4.00E-26	Identity = 30.94%
	3	gi 15639779 ref NP_219229.1	Treponema pallidum subsp. pallidum str. Nichols	E-value = 8.00E-26	Identity = 29.64%
	4	gi 15214031 sp Q9KWX0 FLAB2_TREMA	Treponema maltophilum	E-value = 1.00E-25	Identity = 30.62%
	5	gi 15639853 ref NP_219303.1	Treponema pallidum subsp. pallidum str. Nichols	E-value = 1.00E-25	Identity = 31.60%
AB2245	1	gi 152991354 ref YP_001357076.1	Nitratiruptor sp. SB155-2	E-value = 2.00E-158	Identity = 60.26%
	2	gi 152989894 ref YP_001355616.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-158	Identity = 60.26%
	3	gi 152991668 ref YP_001357389.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-155	Identity = 61.96%
	4	gi 34557050 ref NP_906865.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-147	Identity = 59.69%
	5	gi 78778224 ref YP_394539.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-136	Identity = 54.87%
AB2246	1	gi 78778274 ref YP_394589.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 68.61%
	2	gi 152989906 ref YP_001355628.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 69.59%

	3	gi 154174294 ref YP_001409210.1	Campylobacter curvus 525.92	E-value = 0	Identity = 67.98%
	4	gi 34556667 ref NP_906482.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 69.66%
	5	gi 157164699 ref YP_001467775.1	Campylobacter concisus 13826	E-value = 0	Identity = 66.48%
AB2247	1	recJ gi 57169020 ref ZP_00368148.1	Campylobacter coli RM2228	E-value = 3.00E-120	Identity = 45.80%
	2	gi 34556668 ref NP_906483.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-119	Identity = 42.61%
	3	gi 153952383 ref YP_001397298.1	Campylobacter jejuni subsp. doylei 269.97	E-value = 1.00E-118	Identity = 45.42%
	4	gi 157165222 ref YP_001467773.1	Campylobacter concisus 13826	E-value = 2.00E-118	Identity = 45.14%
	5	gi 121612339 ref YP_999748.1	Campylobacter jejuni subsp. jejuni 81-176	E-value = 3.00E-118	Identity = 45.04%
AB2248	1		*** No matches found ***		
AB2249	1	gi 149909955 ref ZP_01898604.1	Moritella sp. PE36	E-value = 7.00E-14	Identity = 27.41%
	2	gi 153834452 ref ZP_01987119.1	Vibrio harveyi HY01	E-value = 2.00E-13	Identity = 25.14%
	3	gi 28897542 ref NP_797147.1	Vibrio parahaemolyticus RIMD 2210633	E-value = 6.00E-13	Identity = 25.14%
	4	gi 77359566 ref YP_339141.1	Pseudoalteromonas haloplanktis TAC125	E-value = 3.00E-09	Identity = 31.02%
	5	gi 118753972 ref ZP_01601771.1	Shewanella pealeana ATCC 700345	E-value = 1.00E-08	Identity = 26.63%
AB2250	1	thiJ gi 149194370 ref ZP_01871467.1	Caminibacter mediatlanticus TB-2	E-value = 3.00E-47	Identity = 54.44%
	2	gi 78777413 ref YP_393728.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-46	Identity = 56.35%
	3	gi 118474065 ref YP_892402.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-43	Identity = 51.41%
	4	gi 154147989 ref YP_001407156.1	Campylobacter hominis ATCC BAA-381	E-value = 3.00E-42	Identity = 49.44%
	5	gi 154175067 ref YP_001407863.1	Campylobacter curvus 525.92	E-value = 1.00E-41	Identity = 48.07%
AB2251	1	dnaE gi 152992163 ref YP_001357884.1	Sulfurovum sp. NBC37-1	E-value = 0	Identity = 74.72%
	2	gi 152990427 ref YP_001356149.1	Nitratiruptor sp. SB155-2	E-value = 0	Identity = 66.67%
	3	gi 34558271 ref NP_908086.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 65.17%
	4	gi 78777108 ref YP_393423.1	Sulfuromonas denitrificans ATCC 33889	E-value = 0	Identity = 64.00%
	5	gi 157165237 ref YP_001467325.1	Campylobacter concisus 13826	E-value = 0	Identity = 64.54%
AB2252	1	surE gi 152992895 ref YP_001358616.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-91	Identity = 60.77%
	2	gi 152991061 ref YP_001356783.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-86	Identity = 55.38%
	3	gi 32265834 ref NP_859866.1	Helicobacter hepaticus ATCC 51449	E-value = 7.00E-86	Identity = 57.58%
	4	gi 34557990 ref NP_907805.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-85	Identity = 57.85%
	5	gi 149193772 ref ZP_01870870.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-70	Identity = 52.29%
AB2253	1		*** No matches found ***		
AB2254	1	gi 78778215 ref YP_394530.1	Sulfuromonas denitrificans ATCC 33889	E-value = 4.00E-15	Identity = 49.43%
	2	gi 34557624 ref NP_907439.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-08	Identity = 37.50%
	3	gi 152991665 ref YP_001357386.1	Sulfurovum sp. NBC37-1	E-value = 9.00E-08	Identity = 32.10%
	4	gi 157165210 ref YP_001467677.1	Campylobacter concisus 13826	E-value = 1.00E-07	Identity = 45.33%
	5	gi 118474823 ref YP_891352.1	Campylobacter fetus subsp. fetus 82-40	E-value = 4.00E-07	Identity = 40.51%
AB2255	1	moaC gi 78778214 ref YP_394529.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-57	Identity = 75.00%
	2	gi 157165431 ref YP_001467676.1	Campylobacter concisus 13826	E-value = 6.00E-54	Identity = 70.78%
	3	gi 154173634 ref YP_001409053.1	Campylobacter curvus 525.92	E-value = 9.00E-54	Identity = 71.43%
	4	gi 152991442 ref YP_001357164.1	Nitratiruptor sp. SB155-2	E-value = 8.00E-53	Identity = 70.32%
	5	gi 152991666 ref YP_001357387.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-52	Identity = 69.87%
AB2256	1	rpsU gi 57168606 ref ZP_00367739.1	Campylobacter coli RM2228	E-value = 1.00E-16	Identity = 87.32%
	2	gi 148926462 ref ZP_01810145.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-16	Identity = 88.57%
	3	gi 57241700 ref ZP_00369645.1	Campylobacter lari RM2100	E-value = 2.00E-16	Identity = 86.30%
	4	gi 154174430 ref YP_001407474.1	Campylobacter curvus 525.92	E-value = 5.00E-16	Identity = 88.57%
	5	gi 15791737 ref NP_281560.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 6.00E-16	Identity = 87.14%
AB2257	1	gi 154175178 ref YP_001409185.1	Campylobacter curvus 525.92	E-value = 7.00E-52	Identity = 54.78%
	2	gi 157164800 ref YP_001467730.1	Campylobacter concisus 13826	E-value = 2.00E-51	Identity = 56.22%
	3	gi 57241745 ref ZP_00369690.1	Campylobacter lari RM2100	E-value = 2.00E-48	Identity = 51.72%
	4	gi 34556781 ref NP_906596.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-47	Identity = 53.59%

	5	gi 152991576 ref YP_001357298.1	Nitratiruptor sp. SB155-2	E-value = 7.00E-47	Identity = 52.94%
AB2258	1	gi 78778249 ref YP_394564.1	Sulfuromonas denitrificans ATCC 33889	E-value = 8.00E-27	Identity = 70.09%
	2	gi 34556782 ref NP_906597.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-25	Identity = 62.39%
	3	gi 152991577 ref YP_001357299.1	Nitratiruptor sp. SB155-2	E-value = 1.00E-24	Identity = 60.94%
	4	gi 149194936 ref ZP_01872029.1	Caminibacter mediatlanticus TB-2	E-value = 1.00E-23	Identity = 55.64%
	5	gi 154174496 ref YP_001409186.1	Campylobacter curvus 525.92	E-value = 2.00E-23	Identity = 58.54%
AB2259	1	gi 78778256 ref YP_394571.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-45	Identity = 45.37%
	2	gi 152991579 ref YP_001357301.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-39	Identity = 42.73%
	3	gi 152991635 ref YP_001357356.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-37	Identity = 40.17%
	4	gi 34556748 ref NP_906563.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-27	Identity = 31.65%
	5	gi 149194780 ref ZP_01871875.1	Caminibacter mediatlanticus TB-2	E-value = 9.00E-25	Identity = 35.56%
AB2260	1	gi 157165673 ref YP_001467728.1	Campylobacter concisus 13826	E-value = 1.00E-23	Identity = 63.21%
	2	gi 34556749 ref NP_906564.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-23	Identity = 62.14%
	3	gi 154174058 ref YP_001409187.1	Campylobacter curvus 525.92	E-value = 2.00E-22	Identity = 61.54%
	4	gi 149194779 ref ZP_01871874.1	Caminibacter mediatlanticus TB-2	E-value = 5.00E-22	Identity = 61.32%
	5	gi 152991580 ref YP_001357302.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-20	Identity = 53.10%
AB2261	1	gi 152991633 ref YP_001357354.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-57	Identity = 69.73%
	2	gi 34556750 ref NP_906565.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-55	Identity = 68.48%
	3	gi 154175389 ref YP_001409189.1	Campylobacter curvus 525.92	E-value = 2.00E-54	Identity = 63.24%
	4	gi 32265940 ref NP_859972.1	Helicobacter hepaticus ATCC 51449	E-value = 1.00E-52	Identity = 62.70%
	5	gi 86153726 ref ZP_01071929.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 1.00E-50	Identity = 64.32%
AB2262	1	gi 34556751 ref NP_906566.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-76	Identity = 69.31%
	2	gi 78778262 ref YP_394577.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-76	Identity = 72.28%
	3	gi 149194776 ref ZP_01871871.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-71	Identity = 66.50%
	4	gi 152991583 ref YP_001357305.1	Nitratiruptor sp. SB155-2	E-value = 4.00E-71	Identity = 67.82%
	5	gi 154148370 ref YP_001405818.1	Campylobacter hominis ATCC BAA-381	E-value = 2.00E-69	Identity = 64.36%
AB2263	1	gi 78778112 ref YP_394427.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-25	Identity = 43.62%
	2	gi 152991584 ref YP_001357306.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-21	Identity = 36.71%
	3	gi 154174187 ref YP_001409192.1	Campylobacter curvus 525.92	E-value = 1.00E-19	Identity = 38.52%
	4	gi 157165170 ref YP_001465932.1	Campylobacter concisus 13826	E-value = 3.00E-19	Identity = 41.73%
	5	gi 118474486 ref YP_892894.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-17	Identity = 39.37%
AB2264	1	gi 152991615 ref YP_001357336.1	Sulfurovum sp. NBC37-1	E-value = 4.00E-76	Identity = 49.28%
	2	gi 152991585 ref YP_001357307.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-74	Identity = 51.84%
	3	gi 78776246 ref YP_392561.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-60	Identity = 46.72%
	4	gi 34556753 ref NP_906568.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-57	Identity = 41.41%
	5	gi 149194774 ref ZP_01871869.1	Caminibacter mediatlanticus TB-2	E-value = 8.00E-36	Identity = 36.69%
AB2265	1	gi 114777071 ref ZP_01452091.1	Mariprofundus ferrooxydans PV-1	E-value = 2.00E-85	Identity = 47.62%
	2	gi 78485280 ref YP_391205.1	Thiomicrospira crunogena XCL-2	E-value = 1.00E-82	Identity = 49.68%
	3	gi 90019774 ref YP_525601.1	Saccharophagus degradans 2-40	E-value = 1.00E-81	Identity = 47.20%
	4	gi 119946455 ref YP_944135.1	Psychromonas ingrahamii 37	E-value = 3.00E-75	Identity = 49.31%
	5	gi 88703321 ref ZP_01101037.1	gamma proteobacterium KT 71	E-value = 2.00E-70	Identity = 40.13%
AB2266	1	gi 152991718 ref YP_001357439.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-63	Identity = 51.43%
	2	gi 118475086 ref YP_891818.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-63	Identity = 56.56%
	3	gi 154175413 ref YP_001408156.1	Campylobacter curvus 525.92	E-value = 2.00E-57	Identity = 53.06%
	4	gi 148926103 ref ZP_01809789.1	Campylobacter jejuni subsp. jejuni CG8486	E-value = 2.00E-55	Identity = 51.23%
	5	gi 157415243 ref YP_001482499.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 3.00E-55	Identity = 51.23%
AB2267	1	gi 118474351 ref YP_891700.1	Campylobacter fetus subsp. fetus 82-40	E-value = 7.00E-07	Identity = 37.84%
AB2268	1	gi 118579675 ref YP_900925.1	Pelobacter propionicus DSM 2379	E-value = 3.00E-26	Identity = 34.96%
	2	gi 51244008 ref YP_063892.1	Desulfotalea psychrophila LSv54	E-value = 3.00E-22	Identity = 29.92%

	3	gi 85375738 ref YP_459800.1	Erythrobacter litoralis HTCC2594	E-value = 6.00E-13	Identity = 26.33%
	4	gi 157164909 ref YP_001466115.1	Campylobacter concisus 13826	E-value = 9.00E-13	Identity = 28.90%
	5	gi 121635158 ref YP_975403.1	Neisseria meningitidis FAM18	E-value = 4.00E-11	Identity = 25.36%
AB2270	1	gi 78776752 ref YP_393067.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-100	Identity = 54.45%
	2	gi 154173625 ref YP_001407928.1	Campylobacter curvus 525.92	E-value = 3.00E-69	Identity = 42.45%
	3	gi 157164813 ref YP_001466429.1	Campylobacter concisus 13826	E-value = 4.00E-69	Identity = 41.32%
	4	gi 152992250 ref YP_001357971.1	Sulfurovum sp. NBC37-1	E-value = 8.00E-69	Identity = 43.23%
	5	gi 109947685 ref YP_664913.1	Helicobacter acinonychis str. Sheeba	E-value = 3.00E-64	Identity = 38.30%
AB2271	1		*** No matches found ***		
AB2272	1	gi 119875208 ref ZP_01642330.1	Stenotrophomonas maltophilia R551-3	E-value = 0	Identity = 46.22%
	2	gi 26989309 ref NP_744734.1	Pseudomonas putida KT2440	E-value = 1.00E-178	Identity = 46.84%
	3	gi 104781601 ref YP_608099.1	Pseudomonas entomophila L48	E-value = 2.00E-178	Identity = 45.88%
	4	gi 119875214 ref ZP_01642336.1	Stenotrophomonas maltophilia R551-3	E-value = 3.00E-170	Identity = 43.30%
	5	gi 118050189 ref ZP_01518739.1	Comamonas testosteroni KF-1	E-value = 1.00E-153	Identity = 43.76%
AB2273	1	gi 34557928 ref NP_907743.1	Wolinella succinogenes DSM 1740	E-value = 9.00E-28	Identity = 30.28%
	2	gi 118475050 ref YP_892365.1	Campylobacter fetus subsp. fetus 82-40	E-value = 6.00E-18	Identity = 30.45%
AB2274	1	gi 78486361 ref YP_392286.1	Thiomicrospira crunogena XCL-2	E-value = 2.00E-33	Identity = 56.30%
	2	gi 34557661 ref NP_907476.1	Wolinella succinogenes DSM 1740	E-value = 5.00E-31	Identity = 52.52%
	3	gi 78776713 ref YP_393028.1	Sulfuromonas denitrificans ATCC 33889	E-value = 6.00E-31	Identity = 60.33%
	4	gi 152991974 ref YP_001357695.1	Sulfurovum sp. NBC37-1	E-value = 1.00E-29	Identity = 58.59%
	5	gi 154149081 ref YP_001406197.1	Campylobacter hominis ATCC BAA-381	E-value = 4.00E-24	Identity = 46.72%
AB2275	1	gi 89093650 ref ZP_01166597.1	Oceanospirillum sp. MED92	E-value = 3.00E-18	Identity = 40.74%
	2	gi 156718720 ref ZP_02060380.1	Hydrogenobaculum sp. Y04AAS1	E-value = 2.00E-17	Identity = 36.76%
	3	gi 86156811 ref YP_463596.1	Anaeromyxobacter dehalogenans 2CP-C	E-value = 3.00E-14	Identity = 32.84%
	4	gi 153005908 ref YP_001380233.1	Anaeromyxobacter sp. Fw109-5	E-value = 2.00E-12	Identity = 33.57%
	5	gi 116234997 dbj BAF34936.1	Hydrogenobacter thermophilus	E-value = 3.00E-12	Identity = 33.08%
AB2276	1	gi 34557576 ref NP_907391.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-75	Identity = 31.05%
	2	gi 121528909 ref ZP_01661522.1	Ralstonia pickettii 12J	E-value = 3.00E-57	Identity = 28.71%
	3	gi 153886064 ref ZP_02007219.1	Ralstonia pickettii 12D	E-value = 7.00E-52	Identity = 28.08%
	4	gi 57505516 ref ZP_00371443.1	Campylobacter upsaliensis RM3195	E-value = 3.00E-46	Identity = 29.45%
	5	gi 88797356 ref ZP_01112946.1	Reinekea sp. MED297	E-value = 8.00E-46	Identity = 25.86%
AB2277	1	gi 108803586 ref YP_643523.1	Rubrobacter xylanophilus DSM 9941	E-value = 2.00E-123	Identity = 59.19%
	2	gi 153006447 ref YP_001380772.1	Anaeromyxobacter sp. Fw109-5	E-value = 2.00E-117	Identity = 55.59%
	3	gi 116619883 ref YP_822039.1	Solibacter usitatus Ellin6076	E-value = 2.00E-117	Identity = 57.30%
	4	gi 156740340 ref YP_001430469.1	Roseiflexus castenholzii DSM 13941	E-value = 2.00E-115	Identity = 54.30%
	5	gi 148654884 ref YP_001275089.1	Roseiflexus sp. RS-1	E-value = 2.00E-115	Identity = 55.16%
AB2278	1	gi 118496649 ref YP_897699.1	Francisella tularensis subsp. novicida U112	E-value = 0	Identity = 82.03%
	2	gi 151569765 gb EDN35419.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 0	Identity = 82.03%
	3	gi 151572900 gb EDN38554.1	Francisella tularensis subsp. novicida GA99-3548	E-value = 0	Identity = 81.94%
	4	gi 115314014 ref YP_762737.1	Francisella tularensis subsp. holarctica OSU18	E-value = 0	Identity = 81.14%
	5	gi 134252748 gb EBA51842.1	Francisella tularensis subsp. holarctica 257	E-value = 0	Identity = 80.96%
AB2279	1	gi 86141600 ref ZP_01060146.1	Flavobacterium sp. MED217	E-value = 0	Identity = 44.30%
	2	gi 126645228 ref ZP_01717772.1	Algoriphagus sp. PR1	E-value = 5.00E-168	Identity = 39.76%
	3	gi 152995018 ref YP_001339853.1	Marinomonas sp. MWYL1	E-value = 4.00E-138	Identity = 35.40%
	4	gi 90022740 ref YP_528567.1	Saccharophagus degradans 2-40	E-value = 1.00E-136	Identity = 34.30%
	5	gi 83643858 ref YP_432293.1	Hahella chejuensis KCTC 2396	E-value = 3.00E-133	Identity = 33.41%
AB2280	1	gi 86141601 ref ZP_01060147.1	Flavobacterium sp. MED217	E-value = 5.00E-79	Identity = 48.63%
	2	gi 152995017 ref YP_001339852.1	Marinomonas sp. MWYL1	E-value = 2.00E-57	Identity = 37.63%
	3	gi 91789021 ref YP_549973.1	Polaromonas sp. JS666	E-value = 5.00E-53	Identity = 35.92%

	4	gi 126645229 ref ZP_01717773.1	Algoriphagus sp. PR1	E-value = 7.00E-53	Identity = 40.27%
	5	gi 87308153 ref ZP_01090295.1	Blastopirellula marina DSM 3645	E-value = 7.00E-53	Identity = 38.05%
AB2281	1	gi 91774964 ref YP_544720.1	Methylobacillus flagellatus KT	E-value = 8.00E-111	Identity = 57.70%
	2	gi 118050244 ref ZP_01518794.1	Comamonas testosteroni KF-1	E-value = 3.00E-103	Identity = 52.24%
	3	gi 114331024 ref YP_747246.1	Nitrosomonas eutropha C91	E-value = 3.00E-103	Identity = 54.34%
	4	gi 148265907 ref YP_001232613.1	Geobacter uraniumreducens Rf4	E-value = 4.00E-103	Identity = 54.06%
	5	gi 71909302 ref YP_286889.1	Dechloromonas aromatica RCB	E-value = 2.00E-102	Identity = 55.65%
AB2282	1	gi 110600889 ref ZP_01389097.1	Geobacter sp. FRC-32	E-value = 2.00E-95	Identity = 66.79%
	2	gi 154252521 ref YP_001413345.1	Parvibaculum lavamentivorans DS-1	E-value = 1.00E-94	Identity = 72.24%
	3	gi 91788245 ref YP_549197.1	Polaromonas sp. JS666	E-value = 2.00E-94	Identity = 68.66%
	4	gi 152980950 ref YP_001352503.1	Janthinobacterium sp. Marseille	E-value = 5.00E-94	Identity = 68.13%
	5	gi 148265908 ref YP_001232614.1	Geobacter uraniumreducens Rf4	E-value = 5.00E-93	Identity = 65.94%
AB2283	1	gi 152980049 ref YP_001352502.1	Janthinobacterium sp. Marseille	E-value = 5.00E-92	Identity = 68.89%
	2	gi 37521642 ref NP_925019.1	Gloeobacter violaceus PCC 7421	E-value = 2.00E-91	Identity = 70.52%
	3	gi 73541658 ref YP_296178.1	Ralstonia eutropha JMP134	E-value = 1.00E-91	Identity = 66.67%
	4	gi 118729596 ref ZP_01578113.1	Delftia acidovorans SPH-1	E-value = 1.00E-90	Identity = 66.54%
	5	gi 145619608 ref ZP_01775655.1	Geobacter bemidjiensis Bem	E-value = 4.00E-89	Identity = 65.66%
AB2284	1	gi 78776355 ref YP_392670.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-111	Identity = 68.61%
	2	gi 78776634 ref YP_392949.1	Sulfuromonas denitrificans ATCC 33889	E-value = 2.00E-105	Identity = 66.67%
	3	gi 118474133 ref YP_892091.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-102	Identity = 63.73%
	4	gi 125974344 ref YP_001038254.1	Clostridium thermocellum ATCC 27405	E-value = 2.00E-102	Identity = 66.12%
	5	gi 34557557 ref NP_907372.1	Wolinella succinogenes DSM 1740	E-value = 3.00E-101	Identity = 67.53%
AB2285	1	gi 34557353 ref NP_907168.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-50	Identity = 32.67%
	2	gi 85711301 ref ZP_01042360.1	Idiomarina baltica OS145	E-value = 1.00E-47	Identity = 30.90%
	3	gi 56460645 ref YP_155926.1	Idiomarina loihiensis L2TR	E-value = 1.00E-41	Identity = 30.08%
	4	gi 78776934 ref YP_393249.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-31	Identity = 30.85%
	5	gi 90418505 ref ZP_01226417.1	Aurantimonas sp. SI85-9A1	E-value = 2.00E-27	Identity = 25.64%
AB2286	1	gi 116619884 ref YP_822040.1	Solibacter usitatus Ellin6076	E-value = 2.00E-13	Identity = 45.98%
	2	gi 108803587 ref YP_643524.1	Rubrobacter xylanophilus DSM 9941	E-value = 3.00E-13	Identity = 40.23%
	3	gi 91204446 emb CAJ70946.1	Candidatus Kuenenia stuttgartiensis	E-value = 1.00E-11	Identity = 44.05%
	4	gi 108761704 ref YP_632245.1	Myxococcus xanthus DK 1622	E-value = 2.00E-10	Identity = 34.48%
	5	gi 37522982 ref NP_926359.1	Gloeobacter violaceus PCC 7421	E-value = 3.00E-10	Identity = 37.65%
AB2287	1	gi 78223113 ref YP_384860.1	Geobacter metallireducens GS-15	E-value = 4.00E-119	Identity = 66.15%
	2	gi 92119020 ref YP_578749.1	Nitrobacter hamburgensis X14	E-value = 2.00E-118	Identity = 66.16%
	3	gi 125975016 ref YP_001038926.1	Clostridium thermocellum ATCC 27405	E-value = 6.00E-118	Identity = 62.43%
	4	gi 148265910 ref YP_001232616.1	Geobacter uraniumreducens Rf4	E-value = 2.00E-117	Identity = 68.42%
	5	gi 91774975 ref YP_544731.1	Methylobacillus flagellatus KT	E-value = 5.00E-117	Identity = 69.97%
AB2288	1	gi 154252525 ref YP_001413349.1	Parvibaculum lavamentivorans DS-1	E-value = 1.00E-23	Identity = 42.96%
	2	gi 84702034 ref ZP_01016609.1	Parvularcula bermudensis HTCC2503	E-value = 2.00E-22	Identity = 41.91%
	3	gi 146299648 ref YP_001194239.1	Flavobacterium johnsoniae UW101	E-value = 1.00E-21	Identity = 41.67%
	4	gi 83592507 ref YP_426259.1	Rhodospirillum rubrum ATCC 11170	E-value = 2.00E-21	Identity = 40.69%
	5	gi 16126861 ref NP_421425.1	Caulobacter crescentus CB15	E-value = 9.00E-21	Identity = 40.31%
AB2289	1	gi 150019157 ref YP_001311411.1	Clostridium beijerinckii NCIMB 8052	E-value = 1.00E-49	Identity = 33.23%
	2	gi 106886953 ref ZP_01354278.1	Clostridium phytofermentans ISDg	E-value = 6.00E-47	Identity = 32.79%
	3	gi 156863129 gb EDO56560.1	Clostridium sp. L2-50	E-value = 6.00E-42	Identity = 31.86%
	4	gi 118746199 ref ZP_01594149.1	Geobacter lovleyi SZ	E-value = 3.00E-28	Identity = 30.29%
AB2290	1	gi 150019158 ref YP_001311412.1	Clostridium beijerinckii NCIMB 8052	E-value = 4.00E-78	Identity = 48.84%
	2	gi 106886954 ref ZP_01354279.1	Clostridium phytofermentans ISDg	E-value = 2.00E-77	Identity = 46.15%
	3	gi 118746200 ref ZP_01594150.1	Geobacter lovleyi SZ	E-value = 2.00E-77	Identity = 46.33%

	4	gi 156863130 gb EDO56561.1	Clostridium sp. L2-50	E-value = 3.00E-67	Identity = 37.86%
	5	gi 37523548 ref NP_926925.1	Gloeobacter violaceus PCC 7421	E-value = 1.00E-40	Identity = 32.27%
AB2291	1		<b>*** No matches found ***</b>		
AB2292	1	gi 118746203 ref ZP_01594153.1	Geobacter lovleyi SZ	E-value = 7.00E-108	Identity = 45.14%
	2	gi 116621617 ref YP_823773.1	Solibacter usitatus Ellin6076	E-value = 2.00E-105	Identity = 44.78%
	3	gi 126648767 ref ZP_01721250.1	Algoriphagus sp. PR1	E-value = 4.00E-105	Identity = 45.21%
	4	gi 151570847 gb EDN36501.1	Francisella tularensis subsp. novicida GA99-3549	E-value = 8.00E-105	Identity = 44.87%
	5	gi 118497762 ref YP_898812.1	Francisella tularensis subsp. novicida U112	E-value = 8.00E-105	Identity = 44.87%
AB2293	1	gi 118474951 ref YP_891223.1	Campylobacter fetus subsp. fetus 82-40	E-value = 0	Identity = 76.08%
	2	gi 154175347 ref YP_001407314.1	Campylobacter curvus 525.92	E-value = 0	Identity = 76.46%
	3	gi 34558070 ref NP_907885.1	Wolinella succinogenes DSM 1740	E-value = 0	Identity = 75.67%
	4	gi 154148859 ref YP_001407268.1	Campylobacter hominis ATCC BAA-381	E-value = 0	Identity = 74.75%
	5	gi 157165061 ref YP_001466014.1	Campylobacter concisus 13826	E-value = 0	Identity = 75.79%
AB2294	1	gi 78777028 ref YP_393343.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-150	Identity = 73.37%
	2	gi 146311916 ref YP_001176990.1	Enterobacter sp. 638	E-value = 2.00E-132	Identity = 60.97%
	3	gi 156933465 ref YP_001437381.1	Enterobacter sakazakii ATCC BAA-894	E-value = 3.00E-131	Identity = 60.56%
	4	gi 16765303 ref NP_460918.1	Salmonella typhimurium LT2	E-value = 7.00E-130	Identity = 60.71%
	5	gi 56413122 ref YP_150197.1	Salmonella enterica subsp. enterica serovar Paratyphi A str. ATCC 9150	E-value = 8.00E-130	Identity = 60.71%
AB2295	1	gi 20150407 pdb 1JE3 A	Escherichia coli	E-value = 5.00E-26	Identity = 78.38%
	2	gi 157368744 ref YP_001476733.1	Serratia proteamaculans 568	E-value = 6.00E-26	Identity = 75.95%
	3	gi 75208822 ref ZP_00709106.1	Escherichia coli B171	E-value = 4.00E-25	Identity = 79.73%
	4	gi 15802365 ref NP_288391.1	Escherichia coli O157:H7 EDL933	E-value = 4.00E-25	Identity = 78.38%
	5	gi 156933464 ref YP_001437380.1	Enterobacter sakazakii ATCC BAA-894	E-value = 5.00E-25	Identity = 76.32%
AB2296	1	gi 34557011 ref NP_906826.1	Wolinella succinogenes DSM 1740	E-value = 1.00E-41	Identity = 58.33%
AB2297	1	gi 34557009 ref NP_906824.1	Wolinella succinogenes DSM 1740	E-value = 7.00E-06	Identity = 36.08%
AB2298	1	gi 34557010 ref NP_906825.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-153	Identity = 50.29%
AB2299	1	gi 104781634 ref YP_608132.1	Pseudomonas entomophila L48	E-value = 9.00E-121	Identity = 34.54%
	2	gi 53986775 gb AAV27209.1	Azospirillum brasilense	E-value = 2.00E-119	Identity = 34.75%
	3	gi 152981197 ref YP_001355173.1	Janthinobacterium sp. Marseille	E-value = 1.00E-117	Identity = 35.25%
	4	gi 148548404 ref YP_001268506.1	Pseudomonas putida F1	E-value = 8.00E-116	Identity = 34.18%
	5	gi 83592776 ref YP_426528.1	Rhodospirillum rubrum ATCC 11170	E-value = 6.00E-114	Identity = 36.19%
AB2300	1	gi 34557007 ref NP_906822.1	Wolinella succinogenes DSM 1740	E-value = 4.00E-47	Identity = 35.74%
	2	gi 34557769 ref NP_907584.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-28	Identity = 30.23%
	3	gi 90415626 ref ZP_01223560.1	marine gamma proteobacterium HTCC2207	E-value = 5.00E-24	Identity = 26.75%
	4	gi 114332056 ref YP_748278.1	Nitrosomonas eutropha C91	E-value = 2.00E-21	Identity = 26.17%
	5	gi 30250073 ref NP_842143.1	Nitrosomonas europaea ATCC 19718	E-value = 4.00E-21	Identity = 25.15%
AB2301	1	gi 34557006 ref NP_906821.1	Wolinella succinogenes DSM 1740	E-value = 6.00E-22	Identity = 37.09%
	2	gi 116496542 gb ABJ99054.1	uncultured bacterium	E-value = 6.00E-16	Identity = 31.61%
	3	gi 15596497 ref NP_249991.1	Pseudomonas aeruginosa PAO1	E-value = 1.00E-15	Identity = 31.61%
	4	gi 49081662 gb AAT50231.1	synthetic construct	E-value = 1.00E-15	Identity = 31.61%
	5	gi 116496538 gb ABJ99052.1	uncultured bacterium	E-value = 1.00E-15	Identity = 31.61%
AB2302	1		<b>*** No matches found ***</b>		
AB2303	1	gi 118602906 ref YP_904121.1	Candidatus Ruthia magnifica str. Cm (Calyptogenia magnifica)	E-value = 4.00E-147	Identity = 50.75%
	2	gi 149926525 ref ZP_01914786.1	Limnobacter sp. MED105	E-value = 2.00E-133	Identity = 47.35%
	3	gi 152994711 ref YP_001339546.1	Marinomonas sp. MWYL1	E-value = 6.00E-122	Identity = 42.67%
	4	gi 77459378 ref YP_348885.1	Pseudomonas fluorescens PFO-1	E-value = 6.00E-122	Identity = 41.30%
	5	gi 117923656 ref YP_864273.1	Magnetococcus sp. MC-1	E-value = 6.00E-119	Identity = 44.44%
AB2304	1	gi 78776522 ref YP_392837.1	Sulfuromonas denitrificans ATCC 33889	E-value = 1.00E-43	Identity = 45.25%
	2	gi 153893049 ref ZP_02013856.1	Opiritaceae bacterium TAV2	E-value = 9.00E-27	Identity = 33.80%

	3	gi 148652851 ref YP_001279944.1	Psychrobacter sp. PRwf-1	E-value = 4.00E-23	Identity = 31.78%
	4	gi 146328888 ref YP_001209439.1	Dichelobacter nodosus VCS1703A	E-value = 2.00E-22	Identity = 32.04%
	5	gi 71065723 ref YP_264450.1	Psychrobacter arcticus 273-4	E-value = 2.00E-21	Identity = 31.78%
AB2305	1	gi 28974231 gb AAO64232.1	Campylobacter fetus	E-value = 3.00E-35	Identity = 58.54%
	2	gi 118474342 ref YP_891654.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-35	Identity = 55.81%
	3	gi 114776377 ref ZP_01451422.1	Mariprofundus ferrooxydans PV-1	E-value = 2.00E-17	Identity = 35.56%
	4	gi 89902577 ref YP_525048.1	Rhodoferrax ferrireducens T118	E-value = 1.00E-16	Identity = 35.34%
	5	gi 118028610 ref ZP_01500072.1	Burkholderia phymatum STM815	E-value = 8.00E-16	Identity = 33.33%
AB2306	1	gi 118475626 ref YP_891653.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-37	Identity = 46.99%
	2	gi 28974232 gb AAO64233.1	Campylobacter fetus	E-value = 5.00E-37	Identity = 46.39%
	3	gi 113968587 ref YP_732380.1	Shewanella sp. MR-4	E-value = 3.00E-27	Identity = 40.56%
	4	gi 114049265 ref YP_739815.1	Shewanella sp. MR-7	E-value = 3.00E-27	Identity = 40.56%
	5	gi 117918700 ref YP_867892.1	Shewanella sp. ANA-3	E-value = 4.00E-27	Identity = 40.56%
AB2307	1	gi 119775626 ref YP_928366.1	Shewanella amazonensis SB2B	E-value = 3.00E-18	Identity = 28.17%
	2	gi 85706266 ref ZP_01037360.1	Roseovarius sp. 217	E-value = 5.00E-17	Identity = 31.63%
	3	gi 149194871 ref ZP_01871965.1	Caminibacter mediatlanticus TB-2	E-value = 7.00E-17	Identity = 37.27%
	4	gi 88794682 ref ZP_01110388.1	Alteromonas macleodii 'Deep ecotype'	E-value = 8.00E-17	Identity = 27.64%
	5	gi 148243933 ref YP_001220172.1	Acidiphilium cryptum JF-5	E-value = 4.00E-16	Identity = 29.61%
AB2308	1	gi 109157726 pdb 2FWT A	Rhodobacter sphaeroides	E-value = 6.00E-09	Identity = 34.74%
AB2309	1		*** No matches found ***		
AB2310	1	gi 149194607 ref ZP_01871703.1	Caminibacter mediatlanticus TB-2	E-value = 2.00E-66	Identity = 64.52%
	2	gi 118475242 ref YP_891651.1	Campylobacter fetus subsp. fetus 82-40	E-value = 3.00E-50	Identity = 50.00%
	3	gi 152993008 ref YP_001358729.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-44	Identity = 42.60%
	4	gi 152991455 ref YP_001357177.1	Nitratiruptor sp. SB155-2	E-value = 3.00E-43	Identity = 42.86%
	5	gi 47566185 ref ZP_00237213.1	Bacillus cereus G9241	E-value = 5.00E-39	Identity = 35.56%
AB2311	1	gi 118474068 ref YP_891650.1	Campylobacter fetus subsp. fetus 82-40	E-value = 2.00E-51	Identity = 37.90%
	2	gi 28974235 gb AAO64236.1	Campylobacter fetus	E-value = 1.00E-47	Identity = 36.92%
	3	gi 157163989 ref YP_001466291.1	Campylobacter concisus 13826	E-value = 1.00E-36	Identity = 30.10%
	4	gi 154148119 ref YP_001406702.1	Campylobacter hominis ATCC BAA-381	E-value = 1.00E-36	Identity = 32.68%
	5	gi 154175055 ref YP_001407799.1	Campylobacter curvus 525.92	E-value = 3.00E-36	Identity = 30.46%
AB2312	1	gi 126657899 ref ZP_01729052.1	Cyanothece sp. CCY0110	E-value = 4.00E-58	Identity = 46.99%
	2	gi 119488863 ref ZP_01621825.1	Lyngbya sp. PCC 8106	E-value = 4.00E-42	Identity = 37.89%
	3	gi 17229480 ref NP_486028.1	Nostoc sp. PCC 7120	E-value = 9.00E-41	Identity = 40.39%
	4	gi 75907046 ref YP_321342.1	Anabaena variabilis ATCC 29413	E-value = 4.00E-40	Identity = 40.00%
	5	gi 77164767 ref YP_343292.1	Nitrosococcus oceani ATCC 19707	E-value = 4.00E-40	Identity = 37.30%
AB2313	1	gi 15792369 ref NP_282192.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 2.00E-18	Identity = 31.82%
	2	gi 57168912 ref ZP_00368042.1	Campylobacter coli RM2228	E-value = 6.00E-18	Identity = 29.75%
	3	gi 88713586 ref ZP_01107668.1	Flavobacteriales bacterium HTCC2170	E-value = 6.00E-18	Identity = 31.28%
	4	gi 126648803 ref ZP_01721286.1	Algoriphagus sp. PR1	E-value = 4.00E-17	Identity = 26.22%
	5	gi 57240657 ref ZP_00368605.1	Campylobacter lari RM2100	E-value = 3.00E-16	Identity = 29.41%
AB2314	1		*** No matches found ***		
AB2315	1	<i>thyX</i>	*** No matches found ***		
AB2316	1	<i>glsA</i>	Burkholderia sp. 383	E-value = 3.00E-88	Identity = 52.94%
	2	gi 91778970 ref YP_554178.1	Burkholderia xenovorans LB400	E-value = 3.00E-88	Identity = 52.46%
	3	gi 118035386 ref ZP_01506794.1	Burkholderia phytofirmans PsJN	E-value = 4.00E-88	Identity = 52.46%
	4	gi 116252369 ref YP_768207.1	Rhizobium leguminosarum bv. viciae 3841	E-value = 5.00E-88	Identity = 50.49%
	5	gi 34499613 ref NP_903828.1	Chromobacterium violaceum ATCC 12472	E-value = 8.00E-88	Identity = 50.16%
AB2317	1	gi 152990839 ref YP_001356561.1	Nitratiruptor sp. SB155-2	E-value = 6.00E-44	Identity = 52.26%
	2	gi 152992916 ref YP_001358637.1	Sulfurovum sp. NBC37-1	E-value = 5.00E-42	Identity = 54.59%

	3	gi 78777777 ref YP_394092.1	Sulfuromonas denitrificans ATCC 33889	E-value = 3.00E-41	Identity = 52.26%
	4	gi 118474290 ref YP_892096.1	Campylobacter fetus subsp. fetus 82-40	E-value = 1.00E-39	Identity = 44.33%
	5	gi 34558238 ref NP_908053.1	Wolinella succinogenes DSM 1740	E-value = 2.00E-39	Identity = 47.03%
AB2318	1	gi 152992667 ref YP_001358388.1	Sulfurovum sp. NBC37-1	E-value = 2.00E-17	Identity = 39.22%
	2	gi 118074974 ref ZP_01543123.1	Shewanella woodyi ATCC 51908	E-value = 2.00E-13	Identity = 34.48%
	3	gi 116052565 ref YP_792880.1	Pseudomonas aeruginosa UCBPP-PA14	E-value = 8.00E-13	Identity = 31.08%
	4	gi 157373599 ref YP_001472199.1	Shewanella sediminis HAW-EB3	E-value = 9.00E-13	Identity = 32.26%
	5	gi 15599729 ref NP_253223.1	Pseudomonas aeruginosa PAO1	E-value = 4.00E-12	Identity = 30.34%
AB2319	1	<i>purN</i> gi 78777814 ref YP_394129.1	Sulfuromonas denitrificans ATCC 33889	E-value = 9.00E-45	Identity = 56.32%
	2	gi 20089214 ref NP_615289.1	Methanosarcina acetivorans C2A	E-value = 7.00E-33	Identity = 42.02%
	3	gi 68550499 ref ZP_00589946.1	Pelodictyon phaeoclathratiforme BU-1	E-value = 5.00E-31	Identity = 36.79%
	4	gi 150003621 ref YP_001298365.1	Bacteroides vulgatus ATCC 8482	E-value = 2.00E-30	Identity = 42.54%
	5	gi 73668823 ref YP_304838.1	Methanosarcina barkeri str. Fusaro	E-value = 2.00E-30	Identity = 41.49%
AB2320	1	<i>ruvC</i> gi 154175236 ref YP_001409235.1	Campylobacter curvus 525.92	E-value = 1.00E-57	Identity = 74.68%
	2	gi 57504596 ref ZP_00370708.1	Campylobacter coli RM2228	E-value = 6.00E-57	Identity = 74.68%
	3	gi 157415948 ref YP_001483204.1	Campylobacter jejuni subsp. jejuni 81116	E-value = 7.00E-57	Identity = 74.68%
	4	gi 34558502 ref NP_908317.1	Wolinella succinogenes DSM 1740	E-value = 8.00E-57	Identity = 71.61%
	5	gi 57236914 ref YP_179867.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 1.00E-56	Identity = 74.03%
AB2321	1	gi 57167875 ref ZP_00367015.1	Campylobacter coli RM2228	E-value = 2.00E-14	Identity = 44.66%
	2	gi 57242372 ref ZP_00370311.1	Campylobacter upsaliensis RM3195	E-value = 5.00E-14	Identity = 44.34%
	3	gi 15792289 ref NP_282112.1	Campylobacter jejuni subsp. jejuni NCTC 11168	E-value = 3.00E-13	Identity = 43.69%
	4	gi 86153103 ref ZP_01071308.1	Campylobacter jejuni subsp. jejuni HB93-13	E-value = 4.00E-13	Identity = 42.72%
	5	gi 57237788 ref YP_179036.1	Campylobacter jejuni subsp. jejuni RM1221	E-value = 5.00E-13	Identity = 43.69%