

S9 Table: Acceptor and donor candidates for cami low complexity 10% sub-sampling and *H. pylori* 10% sub-sampling run with yara, one candidate per species, no species filter and no samflag filter. Sampling sensitivity = 90. No taxon blacklist. No parent blacklist. No species blacklist. (-)0.000* represents absolute values < 0.0004. The true positive acceptor and donor of the spiked in HGT organism are marked in bold.

Type	Candidate Name	Accession.Version	MicrobeGPS metrics			DaisyGPS metrics	
			Number Reads	Validity	Heterogeneity	Donor Score	Acceptor Score
Acceptor	<i>Pseudomonas aeruginosa</i> DSM 50071	NZ_CP012001.1	411552	0.99	0.003	0.987	0.018
Acceptor	<i>Paracoccus denitrificans</i> PD1222	NC_008686.1	105227	0.983	0.032	0.951	0.005
Acceptor	<i>Xylella fastidiosa</i> subsp. <i>fastidiosa</i> GB514	NC_017562.1	9952	0.911	0.011	0.900	0.000*
Acceptor	<i>Desulfatibacillum alkenivorans</i> AK-01	NC_011768.1	26663	0.317	0.038	0.28	0.000*
Acceptor	<i>Nonlabens dokdonensis</i> DSW-6	NC_020156.1	4139	0.976	0.014	0.961	0.000*
Acceptor	<i>Exiguobacterium</i> sp. ZWU0009	NZ_CP018057.1	37171	0.182	0.096	0.086	0.000*
Acceptor	<i>Escherichia coli</i> str. K-12 substr. DH10B	NC_010473.1	19729	0.215	0.08	0.136	0.000*
Acceptor	<i>Exiguobacterium</i> sp. U13-1	NZ_CP015731.1	31829	0.168	0.098	0.070	0.000*
Acceptor	<i>Exiguobacterium</i> sp. MH3	NC_022794.1	31009	0.167	0.09	0.067	0.000*
Acceptor	<i>Rhodanobacter denitrificans</i>	NC_020541.1	155	0.144	0.109	0.036	0.000*
Acceptor	<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	NZ_AP014652.1	55	0.002	0.22	-0.218	-0.000*
Acceptor	<i>Shigella dysenteriae</i> Sd197	NC_007606.1	551	0.09	0.113	-0.023	-0.000*
Acceptor	<i>Sanguibacter keddieii</i> DSM 10542	NC_013521.1	54	0.003	0.247	-0.244	-0.000*
Acceptor	<i>Kytococcus sedentarius</i> DSM 20547	NC_013169.1	51	0.003	0.266	-0.262	-0.000*
Acceptor	<i>Cellulomonas fimi</i> ATCC 484	NC_015514.1	70	0.004	0.257	-0.253	-0.000*
Acceptor	<i>Kineococcus radiotolerans</i> SRS30216 = ATCC BAA-149	NC_009664.2	75	0.009	0.302	-0.294	-0.000*
Acceptor	<i>Rhodobacter</i> sp. LPB0142	NZ_CP017781.1	65	0.008	0.373	-0.365	-0.000*
Acceptor	<i>Bacillus subtilis</i>	NZ_LN649259.1	69	0.002	0.350	-0.348	-0.000*
Acceptor	<i>Herbaspirillum rubrisubalbicans</i> M1	NZ_CP013737.1	80	0.004	0.322	-0.318	-0.000*
Acceptor	<i>Selenomonas</i> sp. oral taxon 478	NZ_CP012071.1	67	0.002	0.41	-0.408	-0.000*
Acceptor	<i>Serinicoccus</i> sp. JLT9	NZ_CP014989.1	93	0.015	0.325	-0.310	-0.000*
Acceptor	<i>Acidovorax</i> sp. JS42	NC_008782.1	70	0.001	0.473	-0.472	-0.000*
Acceptor	<i>Streptococcus pneumoniae</i> CGSP14	NC_010582.1	69	0.006	0.489	-0.483	-0.000*
Acceptor	<i>Clostridioides difficile</i> M120	NC_017174.1	79	0.002	0.425	-0.423	-0.000*
Acceptor	<i>Streptococcus pyogenes</i>	NZ_CP007241.1	68	0.001	0.496	-0.495	-0.000*
Acceptor	<i>Escherichia fergusonii</i> ATCC 35469	NC_011740.1	83	0.009	0.417	-0.408	-0.000*
Acceptor	<i>Herbaspirillum seropedicae</i>	NZ_CP011930.1	117	0.007	0.31	-0.303	-0.000*
Acceptor	<i>Streptococcus agalactiae</i> 2603V/R	NC_004116.1	64	0.001	0.555	-0.554	-0.000*
Acceptor	<i>Streptococcus suis</i>	NZ_CP007497.1	66	0.002	0.542	-0.54	-0.000*
Acceptor	<i>Collimonas arenae</i>	NZ_CP013233.1	109	0.003	0.359	-0.356	-0.000*
Donor	<i>Streptococcus pyogenes</i>	NZ_CP007240.1	68	0.001	0.982	-0.980	-0.000*
Donor	<i>Streptococcus constellatus</i> subsp. <i>pharyngis</i> C1050	NC_022238.1	68	0.001	0.951	-0.950	-0.000*
Donor	<i>Streptococcus agalactiae</i>	NZ_CP013908.1	65	0.001	0.915	-0.914	-0.000*
Donor	<i>Aerococcus christensenii</i>	NZ_CP014159.1	68	0.002	0.911	-0.91	-0.000*
Donor	<i>Rhodococcus</i> sp. p52	NZ_CP016819.1	115	0.003	0.869	-0.866	-0.000*
Donor	<i>Gordonia bronchialis</i> DSM 43247	NC_013441.1	307	0.003	0.864	-0.862	-0.000*
Donor	<i>Shinella</i> sp. HZN7	NZ_CP015736.1	107	0.002	0.85	-0.848	-0.000*
Donor	<i>Janthinobacterium</i> sp. Marseille	NC_009659.1	99	0.002	0.836	-0.834	-0.000*
Donor	<i>Nocardia soli</i>	NZ_CP018082.1	214	0.001	0.824	-0.823	-0.000*
Donor	<i>Hermiimonas arsenicoxydans</i>	NC_009138.1	74	0.003	0.817	-0.815	-0.000*
Donor	<i>Enterococcus faecium</i> Aus0085	NC_021994.1	85	0.002	0.795	-0.793	-0.000*
Donor	<i>Helicobacter pylori</i>	NZ_AP014710.1	925	0.018	0.804	-0.786	-0.000*
Donor	<i>Ochrobactrum anthropi</i> ATCC 49188	NC_009668.1	211	0.006	0.719	-0.713	-0.000*
Donor	<i>Streptococcus suis</i> TL13	NC_021213.1	70	0.003	0.689	-0.686	-0.000*
Donor	<i>Erysipelothrix rhusiopathiae</i>	NZ_CP014861.1	78	0.003	0.687	-0.684	-0.000*
Donor	<i>Rhodococcus pyridinivorans</i> SB3094	NC_023150.1	100	0.003	0.662	-0.659	-0.000*
Donor	<i>Defluviimonas alba</i>	NZ_CP012661.1	139	0.012	0.657	-0.645	-0.000*
Donor	<i>Escherichia albertii</i> KF1	NZ_CP007025.1	117	0.003	0.627	-0.624	-0.000*
Donor	<i>Brevibacterium linens</i>	NZ_CP014869.1	104	0.001	0.616	-0.615	-0.000*
Donor	<i>Staphylococcus epidermidis</i> RP62A	NC_002976.3	131	0.001	0.601	-0.59	-0.000*
Donor	<i>Staphylococcus pseudintermedius</i> HKU10-03	NC_014925.1	143	0.001	0.586	-0.585	-0.000*
Donor	<i>Propionibacterium freudenreichii</i> subsp. <i>freudenreichii</i>	NZ_CP010341.1	203	0.002	0.569	-0.567	-0.000*
Donor	<i>Enterobacter asburiae</i>	NZ_CP011863.1	103	0.002	0.561	-0.559	-0.000*
Donor	<i>Pannonibacter phragmitetus</i>	NZ_CP013068.1	144	0.001	0.552	-0.550	-0.000*
Donor	<i>Hermiimonas</i> sp. AS8	NZ_LT671418.1	97	0.002	0.489	-0.487	-0.000*
Donor	<i>Streptococcus pneumoniae</i> CGSP14	NC_010582.1	69	0.006	0.489	-0.483	-0.000*
Donor	<i>Acidovorax</i> sp. JS42	NC_008782.1	70	0.001	0.473	-0.472	-0.000*
Donor	<i>Janthinobacterium agaricidamnosum</i> NBRC 102515 = DSM 9628	NZ_HG322949.1	416	0.029	0.488	-0.459	-0.000*
Donor	<i>Collimonas pratensis</i>	NZ_CP013236.1	104	0.002	0.46	-0.458	-0.000*
Donor	<i>Arsenicococcus</i> sp. oral taxon 190	NZ_CP012070.1	242	0.006	0.451	-0.445	-0.000*
Acceptor-like Donor	<i>Nonlabens dokdonensis</i> DSW-6	NC_020156.1	4139	0.976	0.014	0.961	0.000*
Acceptor-like Donor	<i>Paracoccus denitrificans</i> PD1222	NC_008687.1	65818	0.989	0.033	0.956	0.003