

Peptide	(Sub)phylum	Species	Gene cluster (NCBI accession + antiSMASH gene cluster number)	NRP search tag
Micropeptin	Cyanobacteria	<i>Microcystis Aeruginosa</i> K-139	AB481215_c1	Asp-Thr-Arg-Thr-Ile-Tyr-Ile Ala-Asp-Gly-Phe-Pro-Tyr-Trp- Gly-Leu-Leu
Skylamycin	Actinobacteria	<i>Streptomyces</i> sp. Acta 2897 <i>Streptomyces pyridomyceticus</i> NRRL B-2517	JF430460_c1	Pip-Thr-Ala-Xxx-Xxx Gly-Cys-Ser-Cys-Gly
Pyridomycin	Actinobacteria	<i>Myxococcus xanthus</i> DK897	HM436809_c1	Pro-Ala-Thr-Phe-Ala-Phe-Ile-Pro
Althiomycin	Deltaproteobacteria	<i>Streptomyces griseoflavus</i> w-384	HQ542230_c1	Thr-Leu-Leu-Phe-Val-Phe-Val
Hormaomycin	Actinobacteria	<i>Bacillus</i> sp. NK 2003	JF828091_c1	Gln-Gly-Pro-Phe-Ile-Pro
Koranimine	Firmicutes	<i>Nostoc</i> sp. Strain 152	JF430079_c1	Ser-Ala-Gly-Hpg-Ala-Tyr Ser-Leu-Val-Ser-Val-Ser-Tyr-Lys- Ala
Nostophycin	Cyanobacteria	<i>Streptomyces roseosporus</i> NRRL 11379	NZ_ABYX01000222_c1	Asp-Arg-Xxx-Glu-Ser Tyr-Met-Dab-Trp
Arylomycin	Actinobacteria	<i>Myxococcus xanthus</i> DK 1622	NC_008095_c11	Xxx-Asp-Dab-Asp-Gly-Orn
Myxoprincomide	Deltaproteobacteria	<i>Nostoc</i> sp. 73.1	JF342711_c1	Cys-Thr
Nodularin	Cyanobacteria	<i>Streptomyces</i> sp. DSM5940	HQ287563_c1	Cys-Leu
Napsamycin	Actinobacteria	<i>Ralstonia eutropha</i> H16	NC_008314_c1	Thr-Orn
Cupriachelin	Betaproteobacteria	<i>Actinoalloteichus</i> sp. WH1-2216-6	JF419316_c1	Lys-Lys-Thr
Caerulomycin	Actinobacteria	<i>Streptomyces</i> sp. CS40	HE575208_c1	Dhb-Ala-Thr
Collismycin	Actinobacteria	<i>Rhodococcus jostii</i> RHA1	NC_008268_c8	Sal-Thr-Lys
Rhodoachelin	Actinobacteria	<i>Nocardia farcinica</i> IFM 10152	NC_006361_c3	
Nocobactin	Actinobacteria	<i>Paenibacillus eigii</i> B69	HQ668144_c1	
Paenibactin	Firmicutes	<i>Mycobacterium tuberculosis</i> H37Rv	NC_000962_c9	
Mycobactin	Actinobacteria			

**Table S1: NRP2Path benchmarking dataset.** The table displays 18 recently experimentally characterized NRPs and their biosynthetic gene clusters used for benchmarking NRP2Path. Rare amino acids that are not covered by the Pep2Path translation table are marked as 'Xxx'.