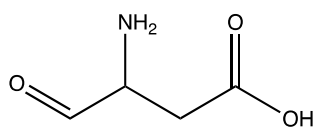


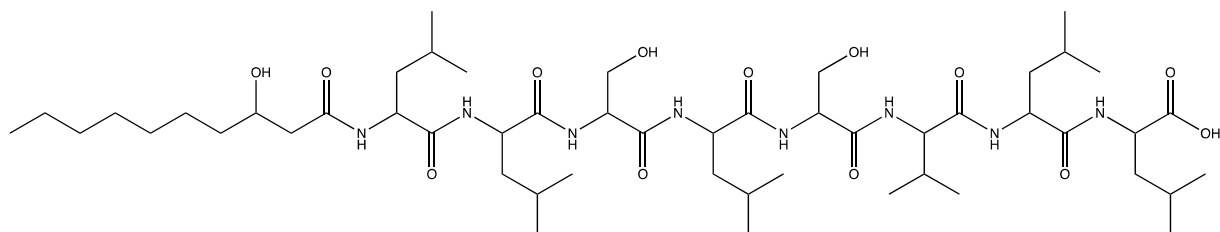
Table S1: Five global protein families used in phylogenetic analysis.

S N	Protein family	Type	BRIC ID										
			fig 11 24983. 3.peg. 615	fig 11361 38.3.peg. 4231	fig 11797 78.3.peg.2 229	fig 12070 75.3.peg.5 03	fig 12181 69.3.peg.5 062	fig 12294 86.3.peg.3 270	fig 13305 31.3.peg.4 361	fig 20592 2.5.peg.56 5	fig 22066 4.5.peg.61 7	fig 23760 9.3.peg.46 85	fig 95300. 39.peg.49 83
1	PGF_10 357928	Prot eins	fig 11 24983. 3.peg. 615	fig 11361 38.3.peg. 4231	fig 11797 78.3.peg.2 229	fig 12070 75.3.peg.5 03	fig 12181 69.3.peg.5 062	fig 12294 86.3.peg.3 270	fig 13305 31.3.peg.4 361	fig 20592 2.5.peg.56 5	fig 22066 4.5.peg.61 7	fig 23760 9.3.peg.46 85	fig 95300. 39.peg.49 83
	PGF_10 357928	Cod ons	fig 12 07075. 3.peg. 503	fig 12181 69.3.peg. 5062	fig 11361 38.3.peg.4 231	fig 11797 78.3.peg.2 229	fig 12294 86.3.peg.3 270	fig 13305 31.3.peg.4 361	fig 22066 4.5.peg.61 7	fig 23760 9.3.peg.46 85	fig 11249 83.3.peg.6 15	fig 20592 2.5.peg.56 5	fig 95300. 39.peg.49 83
2	PGF_00 413208	Prot eins	fig 11 24983. 3.peg. 1129	fig 11361 38.3.peg. 2780	fig 11797 78.3.peg.9 06	fig 12070 75.3.peg.4 515	fig 12181 69.3.peg.5 780	fig 12294 86.3.peg.2 395	fig 13305 31.3.peg.4 20	fig 20592 2.5.peg.10 39	fig 22066 4.5.peg.11 25	fig 23760 9.3.peg.41 17	fig 95300. 39.peg.20 06
	PGF_00 413208	Cod ons	fig 20 5922.5 .peg.1 039	fig 13305 31.3.peg. 420	fig 11361 38.3.peg.2 780	fig 23760 9.3.peg.41 17	fig 12181 69.3.peg.5 780	fig 22066 4.5.peg.11 25	fig 11249 83.3.peg.1 129	fig 12070 75.3.peg.4 515	fig 11797 78.3.peg.9 06	fig 12294 86.3.peg.2 395	fig 95300. 39.peg.20 06
3	PGF_03 050893	Prot eins	fig 11 24983. 3.peg. 3348	fig 11361 38.3.peg. 1592	fig 11797 78.3.peg.3 707	fig 12070 75.3.peg.2 921	fig 12181 69.3.peg.7 259	fig 12294 86.3.peg.5 358	fig 13305 31.3.peg.2 019	fig 20592 2.5.peg.22 30	fig 22066 4.5.peg.33 53	fig 23760 9.3.peg.15 36	fig 95300. 39.peg.46 72
	PGF_03 050893	Cod ons	fig 11 36138. 3.peg. 1592	fig 20592 2.5.peg.2 230	fig 12070 75.3.peg.2 921	fig 12294 86.3.peg.5 358	fig 22066 4.5.peg.33 53	fig 13305 31.3.peg.2 019	fig 23760 9.3.peg.15 36	fig 12181 69.3.peg.7 259	fig 11249 83.3.peg.3 348	fig 11797 78.3.peg.3 707	fig 95300. 39.peg.46 72
4	PGF_03 790040	Prot eins	fig 11 24983. 3.peg. 1102	fig 11361 38.3.peg. 2760	fig 11797 78.3.peg.5 97	fig 12070 75.3.peg.9 83	fig 12181 69.3.peg.4 071	fig 12294 86.3.peg.2 83	fig 13305 31.3.peg.4 817	fig 20592 2.5.peg.10 12	fig 22066 4.5.peg.10 99	fig 23760 9.3.peg.10 83	fig 95300. 39.peg.25 3
	PGF_03 790040	Cod ons	fig 20 5922.5 .peg.1 012	fig 12070 75.3.peg. 983	fig 12181 69.3.peg.4 071	fig 13305 31.3.peg.4 817	fig 11249 83.3.peg.1 102	fig 11797 78.3.peg.5 97	fig 23760 9.3.peg.10 83	fig 22066 4.5.peg.10 99	fig 11361 38.3.peg.2 760	fig 12294 86.3.peg.2 83	fig 95300. 39.peg.25 3
5	PGF_00 026362	Prot eins	fig 11 24983. 3.peg. 615	fig 11361 38.3.peg. 4231	fig 11797 78.3.peg.1 229	fig 12070 75.3.peg.5 03	fig 12181 69.3.peg.2 062	fig 12294 86.3.peg.3 270	fig 13305 31.3.peg.2 361	fig 20592 2.5.peg.53	fig 22066 4.5.peg.59	fig 23760 9.3.peg.49	fig 95300. 39.peg.14

			3.peg. 5828	3408	75	218	780	788	399	42	59	15	71
	PGF_00 026362	Cod ons	fig 11 24983. 3.peg. 5828	fig 11361 38.3.peg. 3408	fig 23760 9.3.peg.49 15	fig 12294 86.3.peg.3 788	fig 12070 75.3.peg.5 218	fig 13305 31.3.peg.2 399	fig 20592 2.5.peg.53 42	fig 22066 4.5.peg.59 59	fig 12181 69.3.peg.2 780	fig 11797 78.3.peg.1 75	fig 95300. 39.peg.14 71

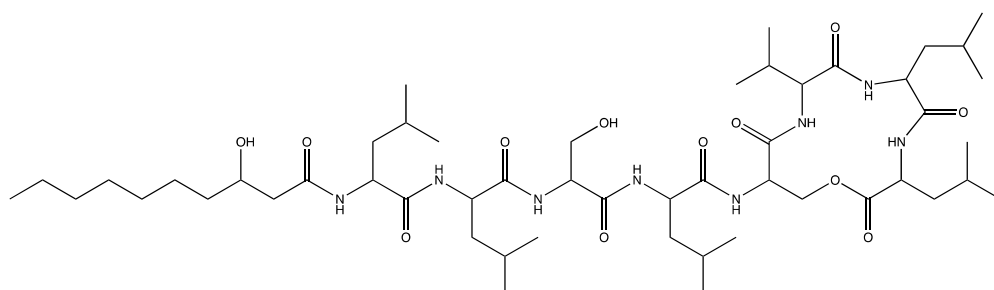


Cluster 2: 3-amino-4-oxobutanoic acid (NRPs)

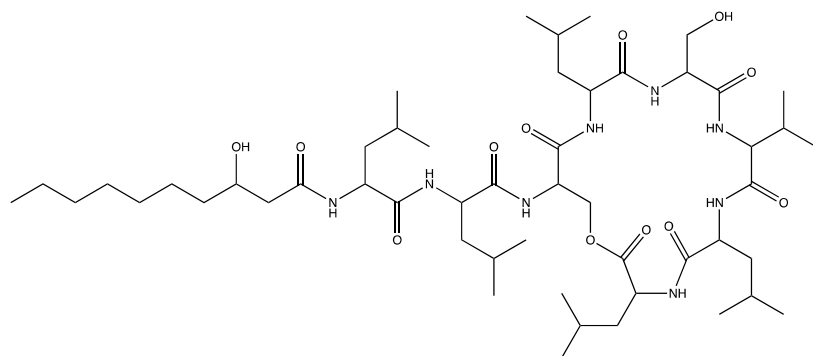


(3-hydroxydecanoyl)leucylleucylserylleucylserylvalylleucylleucine

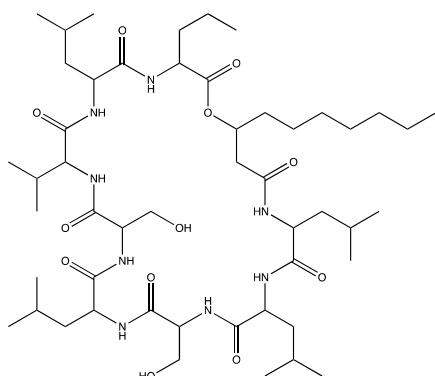
(3-hydroxydecanoyl)leucylleucylserylleucylserylvalylleucylleucine



N-(1-((1-((1-((1-((3,6-diisobutyl-9-isopropyl-2,5,8,11-tetraoxo-1-oxa-4,7,10-triazacyclotridecan-12-yl)amino)-4-methyl-1-oxopentan-2-yl)amino)-3-hydroxy-1-oxopropan-2-yl)amino)-4-methyl-1-oxopentan-2-yl)amino)-4-methyl-1-oxopentan-2-yl)-3-hydroxydecanamide

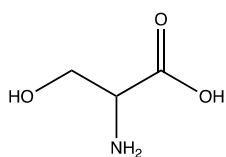


3-hydroxy-*N*-(1-((1-((12-(hydroxymethyl)-3,6,15-triisobutyl-9-isopropyl-2,5,8,11,14,17-hexaoxo-1-oxa-4,7,10,13,16-pentaazacyclonadecan-18-yl)amino)-4-methyl-1-oxopentan-2-yl)amino)-4-methyl-1-oxopentan-2-yl)decanamide

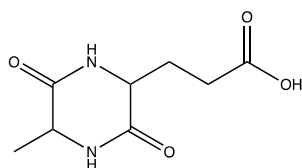


28-heptyl-12,18-bis(hydroxymethyl)-3,6,15,21,24-pentaisobutyl-9-isopropyl-1-oxa-4,7,10,13,16,19,22,25-octazacyclooctacosane-2,5,8,11,14,17,20,23,26-nonaone

Cluster 3: NRPS

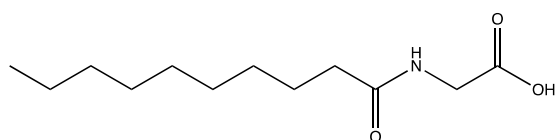


Cluster 4 and 12: Serine (NRPs)

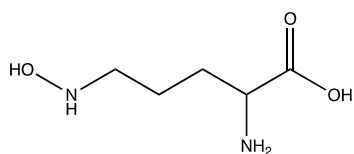


3-(5-methyl-3,6-dioxopiperazin-2-yl)propanoic acid

Cluster 7: Cyclodipeptide (XYP family)

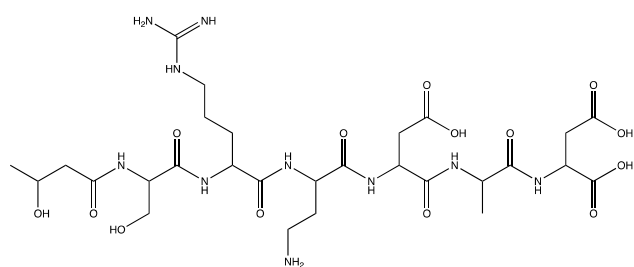


Cluster 8: Decanoylglycine (NRPS)

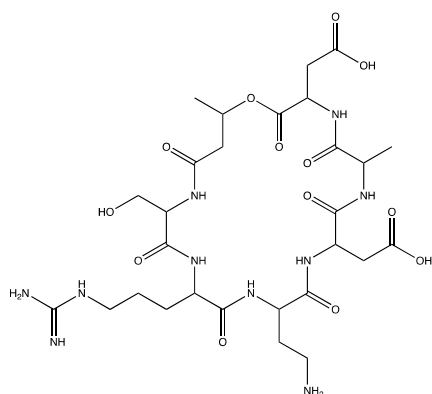


2-amino-5-(hydroxyamino)pentanoic acid

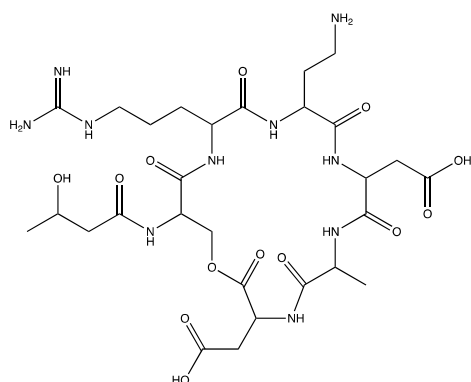
Cluster 9: NRPS



(4-amino-2-(5-guanidino-2-(3-hydroxy-2-(3-hydroxybutanamido)propanamido)pentanamido)butanoyl)aspartylalanylaspartic acid

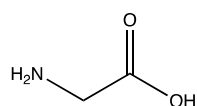


2,2'-(12-(2-aminoethyl)-15-(3-guanidinopropyl)-18-(hydroxymethyl)-6,22-dimethyl-2,5,8,11,14,17,20-hepta-oxo-1-oxa-4,7,10,13,16,19-hexaazacyclodocosane-3,9-diyl)diacetic acid



2,2'-(12-(2-aminoethyl)-15-(3-guanidinopropyl)-18-(3-hydroxybutanamido)-6-methyl-2,5,8,11,14,17-hexa-oxo-1-oxa-4,7,10,13,16-pentaazacyclononadecane-3,9-diyl)diacetic acid

Cluster 10: NRPs



Cluster 11: Glycine (NRPS)

Figure S1: IUPAC name of the predicted secondary metabolites produced by *P. vancouverensis* using PRISM 4 prediction tool.