Predicted Toxin (Red Pentagon) Domain ID: D54

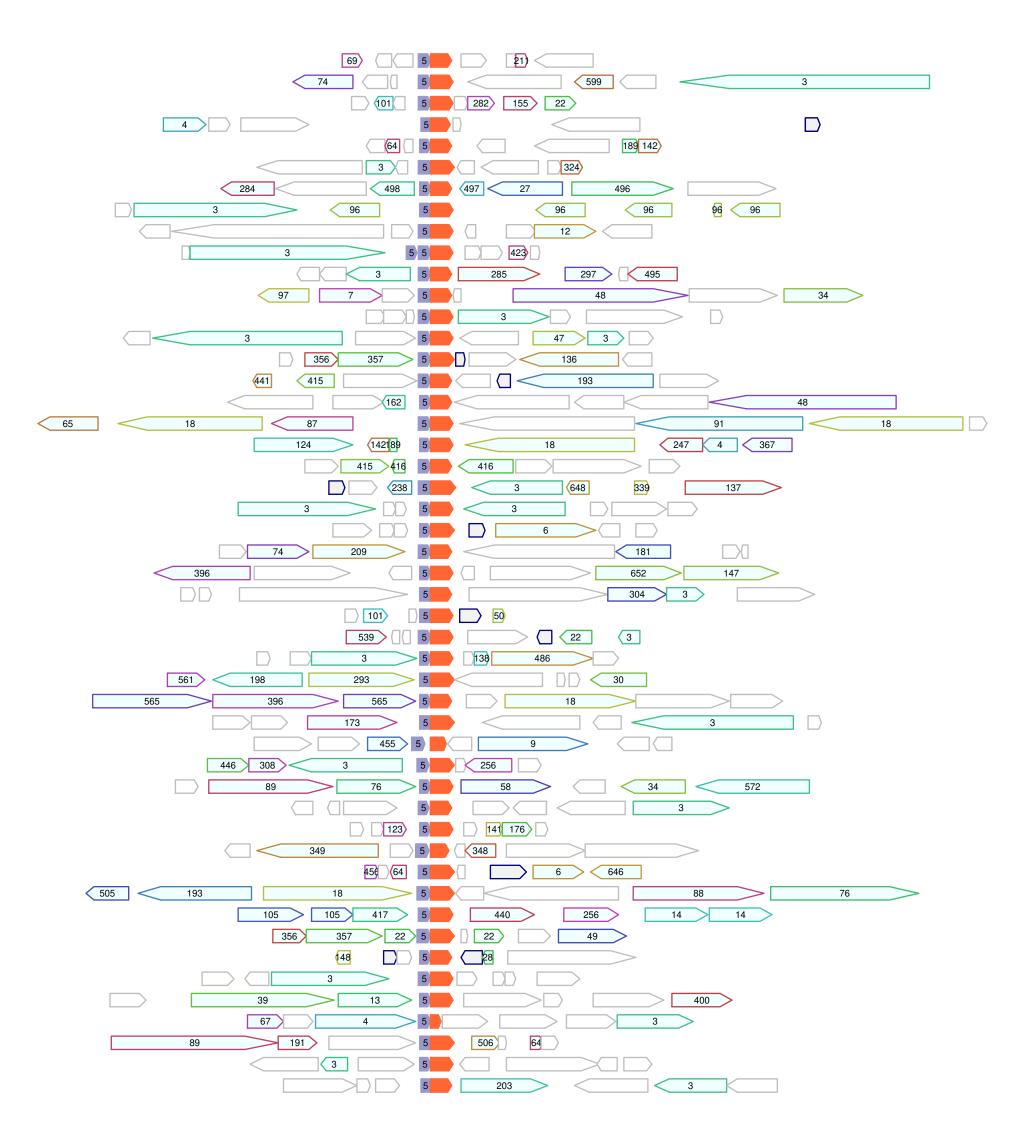
- -- RefSeg Protein Description: PIN domain-containing protein
- -- TADB Annotation: No Hit
- -- NCBI-CDD Annotation: PIN VapC-like
- -- HHpred(Pfam) Annotation: PIN_2; PIN domain (97.31%)
- -- HHpred(PDB) Annotation: 23S rRNA-specific endonuclease VapC20 (98.02%)

Sphaerospermopsis kisseleviana NIES 73 (TA-Like pair: WP 096571719.1 & WP 096571718.1)

Brasilonema sennae CENA114 (TA-Like pair: WP 171977039.1 & WP 171977040.1) Cyanosarcina cf burmensis CCALA 770 (TA-Like pair: WP 106168710.1 & WP 106218196.1) Microcystis aeruginosa NIES 843 (TA-Like pair: WP 004163522.1 & WP 012264121.1) Microcystis viridis NIES 102 (TA-Like pair: WP_041803755.1 & WP_125731724.1) Planktothrix paucivesiculata PCC 9631 (TA-Like pair: WP 083622242.1 & WP 083622245.1) Mucilaginibacter gracilis (TA-Like pair: WP 121197331.1 & WP 121197330.1) Coleofasciculus chthonoplastes PCC 7420 (TA-Like pair: WP_006101745.1 & WP_006101751.1) Treponema primitia ZAS 2 (TA-Like pair: WP 041610969.1 & WP 148257211.1) Planktothrix serta PCC 8927 (TA-Like pair: WP 083625634.1 & WP 083625633.1) Mucilaginibacter gracilis (TA-Like pair: WP_121197055.1 & WP_121197054.1) Dyadobacter psychrotolerans (TA-Like pair: WP 131960709.1 & WP 131960708.1) Limnothrix rosea IAM M 220 (TA-Like pair: WP 075892057.1 & WP 075892059.1) Nostoc commune NIES 4072 (TA-Like pair: WP_109008950.1 & WP_109008951.1) Crocosphaera chwakensis CCY0110 (TA-Like pair: WP 008275798.1 & WP 008275797.1) Treponema primitia ZAS 2 (TA-Like pair: WP 015707459.1 & WP 041611049.1) Dyadobacter soli (TA-Like pair: WP 176885127.1 & WP 176885128.1) Geobacter uraniireducens Rf4 (TA-Like pair: WP 011937533.1 & WP 011937532.1) Geminocystis herdmanii PCC 6308 (TA-Like pair: WP 017296041.1 & WP 017296042.1) Parapedobacter luteus (TA-Like pair: WP 079715264.1 & WP 079715263.1) Scytonema hofmanni UTEX 2349 (TA-Like pair: WP 029633853.1 & WP 029633852.1) Phormidium ambiguum IAM M 71 (TA-Like pair: WP 073596534.1 & WP 073596535.1) Thiomicrospira microaerophila (TA-Like pair: WP 044408400.1 & WP 083944940.1) Mariniradius saccharolyticus AK6 (TA-Like pair: WP_008627278.1 & WP_040480018.1) Candidatus Symbiothrix dinenymphae (TA-Like pair: WP_055430704.1 & WP_055430703.1) Candidatus Symbiothrix dinenymphae (TA-Like pair: WP_055431124.1 & WP_055431125.1) Desulfobacter latus (TA-Like pair: WP 178366390.1 & WP 178366391.1) Calothrix desertica PCC 7102 (TA-Like pair: WP_127085372.1 & WP_127085398.1) Phormidesmis priestleyi ULC007 (TA-Like pair: WP 073072758.1 & WP 073072756.1) Roseiflexus castenholzii DSM 13941 (TA-Like pair: WP 012121458.1 & WP 041330900.1) Proteiniphilum acetatigenes DSM 18083 (TA-Like pair: WP 157278942.1 & WP 019538395.1) Oscillochloris trichoides DG 6 (TA-Like pair: WP_044200062.1 & WP_052294983.1) Flavipsychrobacter stenotrophus (TA-Like pair: WP_105037382.1 & WP_161499170.1) Candidatus Viridilinea mediisalina (TA-Like pair: WP 097645962.1 & WP 097645967.1) Leptolyngbya boryana NIES 2135 (TA-Like pair: WP_017289682.1 & WP_017289683.1) Phaeodactylibacter xiamenensis (TA-Like pair: WP_044220617.1 & WP_160213743.1) Desulfonatronum thioautotrophicum (TA-Like pair: WP 045219881.1 & WP 045219883.1) Mucilaginibacter myungsuensis (TA-Like pair: WP_194111136.1 & WP_194111135.1) Microcystis flos aquae FACHB 1344 (TA-Like pair: WP_190720643.1 & WP_002761289.1) Candidatus Oscillochloris fontis (TA-Like pair: WP 129626414.1 & WP 129626103.1) Desulfamplus magnetovallimortis (TA-Like pair: WP_080803679.1 & WP_080803683.1) Crocosphaera subtropica ATCC 51142 (TA-Like pair: WP_009546098.1 & WP_009546099.1) Crenothrix polyspora (TA-Like pair: WP 087148023.1 & WP 087148022.1) Thiohalocapsa halophila (TA-Like pair: WP_200233897.1 & WP_200233898.1) Beggiatoa alba B18LD (TA-Like pair: WP 002684244.1 & WP 002684243.1) Thiomicrospira aerophila AL3 (TA-Like pair: WP 006460664.1 & WP 006460665.1) Candidatus Chloroploca sp Khr17 (TA-Like pair: WP_129671249.1 & WP_129671250.1) Euhalothece natronophila Z M001 (TA-Like pair: WP 146296337.1 & WP 146296335.1)

Predicted Antitoxin (Blue Pentagon) Domain ID: D99

- -- RefSeg Protein Description: DUF104 domain-containing protein
- -- TADB Annotation: No Hit
- -- NCBI-CDD Annotation: No Hit
- -- HHpred(Pfam) Annotation: No Hit
- -- HHpred(PDB) Annotation: AbrB family transcriptional regulator (66.52%)



** For the description of flanking genes, please check this link: http://130.235.240.53/NetFlax/T8_pdfs/D99.txt

Spirosoma aerolatum (TA-Like pair: WP 080054713.1 & WP 080054712.1)