Predicted Antitoxin (Blue Pentagon) Domain ID: D31

- -- RefSeg Protein Description: type II toxin-antitoxin system Phd/YefM family antitoxin
- -- TADB Annotation: No Hit
- -- NCBI-CDD Annotation: PhdYeFM antitox
- -- HHpred(Pfam) Annotation: PhdYeFM antitox; Antitoxin Phd YefM, type II toxin-antitoxin system (93.89%)Hpred(Pfam) Annotation: ParE toxin; ParE toxin of type II toxin-antitoxin system, parDE (97.21%)
- -- HHpred(PDB) Annotation: Antitoxin VapB46 (96.43%)

Predicted Toxin (Red Pentagon) Domain ID: D53

- -- RefSeg Protein Description: type II toxin-antitoxin system RelE/ParE family toxin
- -- TADB Annotation: Possible toxin ParE1; PubMed: 19016878
- -- NCBI-CDD Annotation: ParE

-- HHpred(PDB) Annotation: Toxin protein parE-1, Antitoxin protein (98.97%)

Nitrosomonas europaea ATCC 19718 (TA-Like pair: WP 011112621.1 & WP 011112620.1) Nitrosospira multiformis ATCC 25196 (TA-Like pair: WP 011382058.1 & WP 011382057.1) Paraglaciecola arctica BSs20135 (TA-Like pair: WP 007617703.1 & WP 007617701.1) Thioflavicoccus mobilis 8321 (TA-Like pair: WP 015279404.1 & WP 015279405.1) Lamprocystis purpurea DSM 4197 (TA-Like pair: WP 020507052.1 & WP 020507053.1) Hellea balneolensis DSM 19091 (TA-Like pair: WP 026940836.1 & WP 034387087.1) Sulfurovum riftiae (TA-Like pair: WP 067328707.1 & WP 067328708.1) Candidatus Methylomirabilis limnetica (TA-Like pair: WP 107560957.1 & WP 107560956.1) Hyphobacterium indicum (TA-Like pair: WP 109260160.1 & WP 109260159.1) Alteromonas mediterranea (TA-Like pair: WP 020745699.1 & WP 157315842.1) Thiorhodococcus minor (TA-Like pair: WP 164455836.1 & WP 164455834.1) Glycocaulis albus (TA-Like pair: WP 188452524.1 & WP 188452523.1) Thiocystis violacea (TA-Like pair: WP 200332690.1 & WP 200332691.1) Thiohalocapsa halophila (TA-Like pair: WP 200238891.1 & WP 200238894.1) Persicirhabdus sediminis (TA-Like pair: WP 200312033.1 & WP_200312034.1) Bathymodiolus brooksi thiotrophic gill symbiont (TA-Like pair: WP 139475191.1 & WP 139475190.1) Rubritalea squalenifaciens DSM 18772 (TA-Like pair: WP 143158734.1 & WP 143158733.1)

^{21 13 32 32} 689 12 713 84 12 721 13 224 661 8 12 721 13 66 4 778 653

^{**} For the description of flanking genes, please check this link: http://130.235.240.53/NetFlax/T8 pdfs/D53.txt