Predicted Antitoxin (Blue Pentagon) Domain ID: D31

-- RefSeq 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%)

-- HHpred(PDB) Annotation: Antitoxin VapB46 (96.43%)

Rickettsia felis URRWXCal2 (TA-Like pair: WP\_011270372.1 & WP\_011270373.1)

Gulosibacter molinativorax DSM 13485 (TA-Like pair: WP\_026936954.1 & WP\_026936955.1)

Microbacterium profundi (TA-Like pair: WP 033107328.1 & WP 033107105.1)

Methylogaea oryzae JCM 16910 (TA-Like pair: WP 054774953.1 & WP 054774954.1)

Sphaerospermopsis aphanizomenoides BCCUSP55 (TA-Like pair: WP 200326231.1 & WP 200326229.1)

Moorea producens PAL 8 15 08 1 (TA-Like pair: WP\_200326231.1 & WP\_200326229.1)

Desulfosarcina ovata subsp sediminis (TA-Like pair: WP 162458871.1 & WP 155322350.1)

Cellulomonas denverensis (TA-Like pair: WP 168630916.1 & WP 168630842.1)

Dolichospermum flos aquae CCAP 1403 13F (TA-Like pair: WP 148762260.1 & WP 148762262.1)

Desulfovibrio sulfodismutans DSM 3696 (TA-Like pair: WP 163301227.1 & WP 163301270.1)

Psychromicrobium silvestre (TA-Like pair: WP 179389479.1 & WP 179389478.1)

Brevibacterium oceani (TA-Like pair: WP 181274590.1 & WP 181274872.1)

Anabaena sphaerica FACHB 251 (TA-Like pair: WP 190564847.1 & WP 190564828.1)

Anabaena lutea FACHB 196 (TA-Like pair: WP 190718965.1 & WP 027404042.1)

Okibacterium fritillariae (TA-Like pair: WP\_159449479.1 & WP\_200811474.1)

\*\* For the description of flanking genes, please check this link: http://130.235.240.53/NetFlax/T8\_pdfs/D57.txt

Predicted Toxin (Red Pentagon) Domain ID: D57

- -- RefSeq Protein Description: type II toxin-antitoxin system ReIE/ParE family toxin
- -- TADB Annotation: toxin relE like VCA0478; PubMed: 25897030
- -- NCBI-CDD Annotation: RelE
- -- HHpred(Pfam) Annotation: Toxin\_YhaV; Toxin with endonuclease activity, of toxin-antitoxin system (97.35%)
- -- HHpred(PDB) Annotation: mRNA interferase ReIE (97.84%)

