

Product datasheet for TP302312

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

C14orf126 (DTD2) (NM_080664) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human chromosome 14 open reading frame 126 (C14orf126), 20 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC202312 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MAEGSRIPQARALLQQCLHARLQIRPADGDVAAQWVEVQRGLVIYVCFFKGADKELLPKMVNTLLNVKLS ETENGKHVSILDLPGNILIIPQATLGGRLKGRNMQYHSNSGKEEGFELYSQFVTLCEKEVAANSKCAEAR

VVVEHGTYGNRQVLKLDTNGPFTHLIEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 18.5 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 542395

 Locus ID:
 112487

 UniProt ID:
 Q96FN9

 RefSeq Size:
 2696





Cytogenetics: 14q12

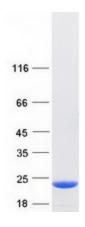
RefSeg ORF: 504

Synonyms: ATD; C14orf126

Summary: Deacylates mischarged D-aminoacyl-tRNAs (By similarity). Probably acts by rejecting L-amino

acids from its binding site rather than specific recognition of D-amino acids (By similarity). Catalyzes the hydrolysis of D-tyrosyl-tRNA(Tyr), has no activity on correctly charged L-tyrosyl-tRNA(Tyr) (By similarity). By recycling D-aminoacyl-tRNA to D-amino acids and free tRNA molecules, this enzyme counteracts the toxicity associated with the formation of D-aminoacyl-tRNA entities in vivo and helps enforce protein L-homochirality. In contrast to DTD1, deacylates L-Ala mischarged on tRNA(Thr)(G4.U69) by alanine-tRNA ligase AARS (PubMed:29410408). Can deacylate L-Ala due to a relaxed specificity for substrate chirality caused by the trans conformation of the Gly-Pro motif in the active site (PubMed:29410408). Also hydrolyzes correctly charged, achiral, glycyl-tRNA(Gly) in vitro, although in vivo EEF1A1/EF-Tu may protect cognate achiral glycyl-tRNA(Gly) from DTD2-mediated deacetylation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Coomassie blue staining of purified DTD2 protein (Cat# TP302312). The protein was produced from HEK293T cells transfected with DTD2 cDNA clone (Cat# [RC202312]) using MegaTran 2.0 (Cat# [TT210002]).