

Product datasheet for PH302312

OriGene Technologies, Inc.

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C14orf126 (DTD2) (NM 080664) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: C14orf126 MS Standard C13 and N15-labeled recombinant protein (NP_542395)

Species: Human **Expression Host: HEK293**

Expression cDNA Clone

or AA Sequence:

RC202312

Predicted MW:

18.7 kDa

>RC202312 protein sequence **Protein Sequence:**

Red=Cloning site Green=Tags(s)

MAEGSRIPQARALLQQCLHARLQIRPADGDVAAQWVEVQRGLVIYVCFFKGADKELLPKMVNTLLNVKLS ETENGKHVSILDLPGNILIIPQATLGGRLKGRNMQYHSNSGKEEGFELYSQFVTLCEKEVAANSKCAEAR

VVVEHGTYGNRQVLKLDTNGPFTHLIEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

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

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

Labeling Method: Labeled with [U-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

25 mM Tris-HCl, 100 mM glycine, pH 7.3 **Buffer:**

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 542395

RefSeg Size: 2696 RefSeq ORF: 504

Synonyms: ATD; C14orf126

Locus ID: 112487 UniProt ID: 096FN9





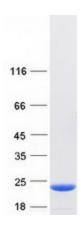
Cytogenetics:

14q12

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]).