

Product datasheet for PH302312

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
Protein Sequence:	>RC202312 protein sequence Red =Cloning site Green =Tags(s) MAEGSRIPQARALLQQCLHARLQIRPADGDVAAQWVEVQRGLVIYVCFKADKELLPKMVNTLLNVKLS ETENKHYVSIIDLPGNILLIIPQATLGGRLKGRNMQYHSNSGKEEGFELYSQFVTLCEKEVAANSKCAEAR VVVEHGTYGNRQVLKLDTNGPFTHLIEF TR TRPLEQ KL ISEEDLAANDILDYKDDDDKV
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
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_542395
RefSeq Size:	2696
RefSeq ORF:	504
Synonyms:	ATD; C14orf126
Locus ID:	112487
UniProt ID:	Q96FN9



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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]).