

Product datasheet for **TP520756**

Dtd2 (NM_029545) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse D-tyrosyl-tRNA deacylase 2 (Dtd2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR220756 protein sequence Red =Cloning site Green =Tags(s)
	 MADGGRVAQARALLQQCLHARLQVRPADGDAAAQWVEIRRGLVIYVCFKADTDLLPKMVNTLLNVKLS ETETGKHVSILDLPGDVLIIPQATLGGRVKGRSMQYHSNSGKEEGSELYSQFVSLCEKAVANNTKSVEAG VAVAHGTYGNRQVLKLDTNGPYTHLIEF TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	18.2 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
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 after receiving vials.
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:	<u>NP_083821</u>
Locus ID:	328092
UniProt ID:	<u>Q8BHA3</u>
RefSeq Size:	2564
Cytogenetics:	12 C1



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RefSeq ORF: 507

Synonyms: 4930578F06Rik; 6530401N04Rik; B830049N13Rik

Summary: Deacylates mischarged D-aminoacyl-tRNAs. Probably acts by rejecting L-amino acids from its binding site rather than specific recognition of D-amino acids. Catalyzes the hydrolysis of D-tyrosyl-tRNA(Tyr), has no activity on correctly charged L-tyrosyl-tRNA(Tyr). 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. 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. 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. [UniProtKB/Swiss-Prot Function]