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C14orf126 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10553b

Product Information

Application	WB, E
Primary Accession	Q96FN9
Other Accession	NP_542395.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28199
Calculated MW	18660
Antigen Region	136-164

Additional Information

Gene ID	112487
Other Names	Probable D-tyrosyl-tRNA(Tyr) deacylase 2, 31--, D-tyrosyl-tRNA deacylase 2, DTD2, C14orf126
Target/Specificity	This C14orf126 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 136-164 amino acids from the C-terminal region of human C14orf126.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	C14orf126 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DTD2
Synonyms	C14orf126
Function	Deacylates mischarged D-aminoacyl-tRNAs (By similarity). Also deacylates

mischarged glycyl-tRNA(Ala), protecting cells against glycine mischarging by AlaRS (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).

Cellular Location Cytoplasm.

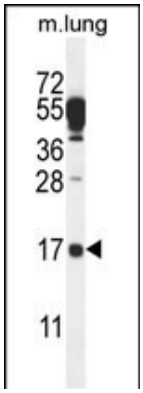
Background

Hydrolyzes D-tyrosyl-tRNA(Tyr) into D-tyrosine and free tRNA(Tyr). Could be a defense mechanism against a harmful effect of D-tyrosine (Potential).

References

Gerhard, D.S., et al. Genome Res. 14 (10B), 2121-2127 (2004) :

Images



C14orf126 Antibody (C-term) (Cat. #AP10553b) western blot analysis in mouse lung tissue lysates (35ug/lane).This demonstrates the C14orf126 antibody detected the C14orf126 protein (arrow).