10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PTRH1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17745c

Product Information

Application	WB, E
Primary Accession	Q86Y79
Other Accession	NP_001002913.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37971
Calculated MW	22937
Antigen Region	102-129

Additional Information

Gene ID	138428
Other Names	Probable peptidyl-tRNA hydrolase, PTH, PTRH1, C9orf115
Target/Specificity	This PTRH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 102-129 amino acids from the Central region of human PTRH1.
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	PTRH1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PTRH1 {ECO:0000303|PubMed:30244831, ECO:0000312|HGNC:HGNC:27039}
Function	Peptidyl-tRNA hydrolase that cleaves nascent chains-tRNAs that are not stably fixed in the P-site of 60S ribosome-nascent chain complexes

(PubMed:30244831). Acts downstream of the ribosome-associated quality control (RQC) pathway to release non-ubiquitinated nascent chains from 60S and 80S ribosome-nascent chain complexes (PubMed:30244831). Does not act on ubiquitinated nascent chains, which are cleaved by ANKZF1 for degradation (PubMed:30244831).

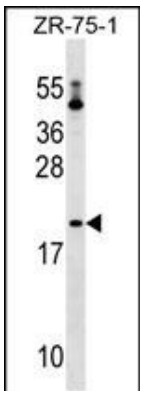
Background

C9orf115 belongs to the Peptidyl-tRNA hydrolase (PTH) family. Peptidyl-tRNA hydrolase (PTH) is a monomeric protein that cleaves the ester bond linking the nascent peptide and tRNA when peptidyl-tRNA is released prematurely from the ribosome. This ensures the recycling of peptidyl-tRNAs into tRNAs produced through abortion of translation and is essential for cell viability.

References

Satoh, J., et al. Neuropathol. Appl. Neurobiol. 35(1):16-35(2009)
De Pereda, J.M., et al. J. Biol. Chem. 279(9):8111-8115(2004)

Images



PTRH1 Antibody (Center) (Cat. #AP17745c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the PTRH1 antibody detected the PTRH1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.