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TUFM Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12916b

Product Information

Application	WB, E
Primary Accession	P49411
Other Accession	P85834, Q8BFR5, NP_003312.3
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22085
Calculated MW	49875
Antigen Region	342-370

Additional Information

Gene ID	7284
Other Names	Elongation factor Tu, mitochondrial, EF-Tu, P43, TUFM
Target/Specificity	This TUFM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 342-370 amino acids from the C-terminal region of human TUFM.
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	TUFM Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TUFM
Function	GTP hydrolase that promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. Participates in mitochondrial translation (By similarity). Also plays a role in the

regulation of autophagy and innate immunity (PubMed:22749352, PubMed:28407488). Recruits ATG5-ATG12 and NLRX1 at mitochondria and serves as a checkpoint of the RIGI-MAVS pathway (PubMed:28407488). In turn, inhibits RLR-mediated type I interferon while promoting autophagy (PubMed:22749352).

Cellular Location Mitochondrion matrix

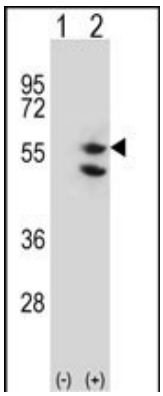
Background

This gene encodes a protein which participates in protein translation in mitochondria. Mutations in this gene have been associated with combined oxidative phosphorylation deficiency resulting in lactic acidosis and fatal encephalopathy. A pseudogene has been identified on chromosome 17.

References

Valente, L., et al. Biochim. Biophys. Acta 1792(8):791-795(2009)
Sasarman, F., et al. Hum. Mol. Genet. 17(23):3697-3707(2008)
Bogenhagen, D.F., et al. J. Biol. Chem. 283(6):3665-3675(2008)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images



Western blot analysis of TUFM (arrow) using rabbit polyclonal TUFM Antibody (C-term) (Cat. #AP12916b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the TUFM gene.

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