

TMM70 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13011b

Product Information

Application Primary Accession	WB, IHC-P, E <u>Q9BUB7</u>
Other Accession	<u>NP_060336.3</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32747
Calculated MW	28969
Antigen Region	231-260

Additional Information

Gene ID	54968
Other Names	Transmembrane protein 70, mitochondrial, TMEM70
Target/Specificity	This TMM70 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 231-260 amino acids from the C-terminal region of human TMM70.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	TMM70 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMEM70 (<u>HGNC:26050</u>)
Function	Scaffold protein that participates in the c-ring assembly of mitochondrial ATP synthase (F(1)F(0) ATP synthase or complex V) by facilitating the membrane insertion and oligomer formation of the subunit c/ATP5MC1 through its interaction (PubMed: <u>31652072</u> , PubMed: <u>32275929</u> ,

	PubMed: <u>33359711</u> , PubMed: <u>33753518</u>). Therefore, participates in the early stage of mitochondrial ATP synthase biogenesis and also protects subunit c/ATP5MC1 against intramitochondrial proteolysis (PubMed: <u>18953340</u> , PubMed: <u>20937241</u> , PubMed: <u>31652072</u> , PubMed: <u>33359711</u>). In addition, binds the mitochondrial proton-transporting ATP synthase complexes I and may play a role in the stability of its membrane-bound subassemblies (PubMed: <u>32275929</u>).
Cellular Location	Mitochondrion inner membrane; Multi-pass membrane protein. Note=Mostly located within the inner cristae membrane
Tissue Location	Lower expressed in the heart than in the liver (at protein level).

Background

This gene likely encodes a mitochondrial membrane protein. The encoded protein may play a role in biogenesis of mitochondrial ATP synthase. Mutations in this gene have been associated with neonatal mitochondrial encephalocardiomyopathy due to ATP synthase deficiency. Alternatively spliced transcript variants have been described.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Karasik, D., et al. J. Bone Miner. Res. 25(7):1555-1563(2010) Honzik, T., et al. Arch. Dis. Child. 95(4):296-301(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)

Images



TMM70 Antibody (C-term) (Cat. #AP13011b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the TMM70 antibody detected the TMM70 protein (arrow).



TMM70 Antibody (C-term) (Cat.

#AP13011b)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TMM70 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.