

TMM70 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13011b

Specification

TMM70 Antibody (C-term) - Product Information

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

TMM70 Antibody (C-term) - 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~~1:10~50

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.

TMM70 Antibody (C-term) - Protein Information

Name TMEM70 (HGNC:26050)

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>33753518</u>, PubMed:<u>33359711</u>, PubMed:<u>32275929</u>). Therefore, participates in the early stage of mitochondrial ATP synthase biogenesis and also protects subunit c/ATP5MC1 against intramitochondrial proteolysis (PubMed:<u>33359711</u>, PubMed:<u>18953340</u>, PubMed:<u>20937241</u>, PubMed:<u>31652072</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

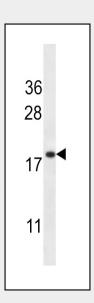
Tissue Location Lower expressed in the heart than in the liver (at protein level).

TMM70 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

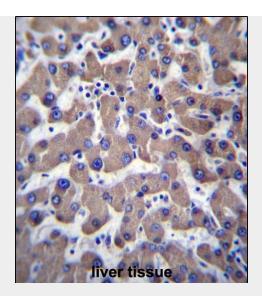
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TMM70 Antibody (C-term) - 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.

TMM70 Antibody (C-term) - 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.

TMM70 Antibody (C-term) - 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)