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LETM1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17447b

Product Information

Application	WB, E
Primary Accession	O95202
Other Accession	NP_036450.1
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37176
Calculated MW	83354
Antigen Region	577-607

Additional Information

Gene ID	3954
Other Names	LETM1 and EF-hand domain-containing protein 1, mitochondrial, Leucine zipper-EF-hand-containing transmembrane protein 1, LETM1
Target/Specificity	This LETM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 577-607 amino acids from the C-terminal region of human LETM1.
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	LETM1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LETM1 (HGNC:6556)
Function	Plays an important role in maintenance of mitochondrial morphology and in mediating either calcium or potassium/proton antiport (PubMed:18628306, PubMed:19797662, PubMed:24344246, PubMed:24898248,

PubMed:29123128, PubMed:32139798, PubMed:36055214, PubMed:36321428). Mediates proton-dependent calcium efflux from mitochondrion (PubMed:19797662, PubMed:24344246, PubMed:29123128). Also functions as an electroneutral mitochondrial proton/potassium exchanger (PubMed:24898248, PubMed:36055214, PubMed:36321428). Crucial for the maintenance of mitochondrial tubular networks and for the assembly of the supercomplexes of the respiratory chain (PubMed:18628306, PubMed:36055214). Required for the maintenance of the tubular shape and cristae organization (PubMed:18628306, PubMed:32139798).

Cellular Location Mitochondrion inner membrane; Single-pass membrane protein

Background

This gene encodes a protein that is localized to the inner mitochondrial membrane. The protein functions to maintain the mitochondrial tubular shapes and is required for normal mitochondrial morphology and cellular viability. Mutations in this gene cause Wolf-Hirschhorn syndrome, a complex malformation syndrome caused by the deletion of parts of the distal short arm of chromosome 4. Related pseudogenes have been identified on chromosomes 8, 15 and 19.

References

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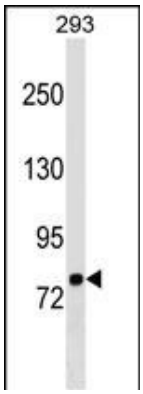
Piao, L., et al. Cell. Signal. 21(5):767-777(2009)
Piao, L., et al. Cancer Res. 69(8):3397-3404(2009)
Tamai, S., et al. J. Cell. Sci. 121 (PT 15), 2588-2600 (2008) :
Dimmer, K.S., et al. Hum. Mol. Genet. 17(2):201-214(2008)

Images



LETM1 Antibody (C-term) (Cat. #AP17447b) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the LETM1 antibody detected the LETM1 protein (arrow).