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LETM1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant LETM1.
Catalog # AT2697a

Product Information

Application	WB, IHC, IF, IP, E
Primary Accession	O95202
Other Accession	NM_012318
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	6F7
Calculated MW	83354

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	LETM1 (NP_036450, 601 a.a. ~ 708 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	LETM1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

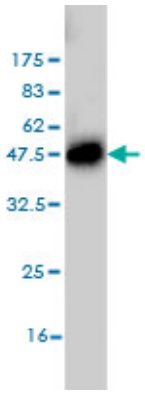
This gene encodes a protein that is localized to the inner mitochondrial membrane. The protein functions to maintain the mitochondrial tubular shapes and is required for normal mitochondrial morphology and cellular viability. Mutations in this gene cause Wolf-Hirschhorn syndrome, a complex malformation 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

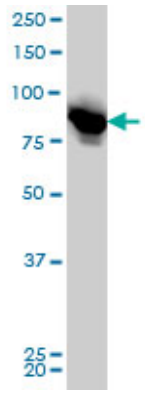
1.High Expression of Leucine Zipper-EF-Hand Containing Transmembrane Protein 1 Predicts Poor Prognosis

in Head and Neck Squamous Cell Carcinoma.Chen L, Yang Y, Liu S, Piao L, Zhang Y, Lin Z, Li Z.BioMed Research International Volume 2014, Article ID 850316,8 pages2.Co-delivery of LETM1 and CTMP synergistically inhibits tumor growth in H-ras12V liver cancer model mice.Shin JY, Chung YS, Kang B, Jiang HL, Yu DY, Han K, Chae C, Moon JH, Jang G, Cho MHCancer Gene Ther. 2013 Feb 8. doi: 10.1038/cgt.2013.6.3.Association of LETM1 and MRPL36 Contributes to the Regulation of Mitochondrial ATP Production and Necrotic Cell Death.Piao L, Li Y, Kim SJ, Byun HS, Huang SM, Hwang SK, Yang KJ, Park KA, Won M, Hong J, Hur GM, Seok JH, Shong M, Cho MH, Brazil DP, Hemmings BA, Park J.Cancer Res. 2009 Apr 15;69(8):3397-404. Epub 2009 Mar 24.4.Regulation of OPA1-mediated mitochondrial fusion by Leucine zipper/EF-hand-containing transmembrane protein-1 plays a role in apoptosis.Piao L, Li Y, Kim SJ, Sohn KC, Yang KJ, Park KA, Byun HS, Won M, Hong J, Hur GM, Seok JH, Shong M, Sack R, Brazil DP, Hemmings BA, Park J.Cell Signal. 2009 May;21(5):767-77. Epub 2009 Jan 9.5.LETM1, deleted in Wolf Hirschhorn syndrome is required for normal mitochondrial morphology and cellular viability.Dimmer KS, Navoni F, Casarin A, Trevisson E, Endele S, Winterpacht A, Salviati L, Scorrano L.Hum Mol Genet. 2008 Jan 15;17(2):201-14. Epub 2007 Oct 9.

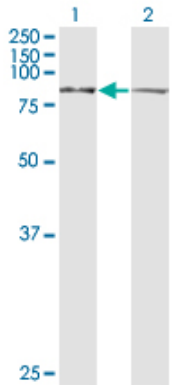
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.62 KDa) .



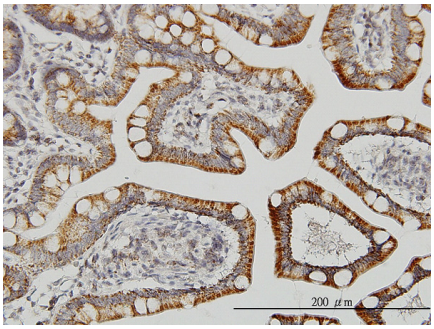
LETM1 monoclonal antibody (M03), clone 6F7 Western Blot analysis of LETM1 expression in HeLa ((Cat # AT2697a)

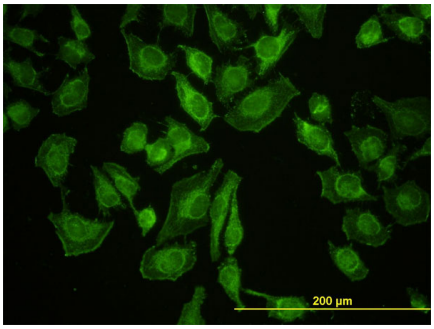


Western Blot analysis of LETM1 expression in transfected 293T cell line by LETM1 monoclonal antibody (M03), clone 6F7.

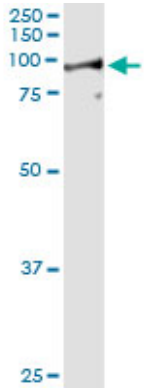
Lane 1: LETM1 transfected lysate(83.4 KDa).
Lane 2: Non-transfected lysate.

Immunoperoxidase of monoclonal antibody to LETM1 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 3 ug/ml]

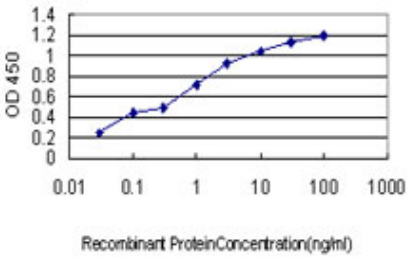




Immunofluorescence of monoclonal antibody to LETM1 on HeLa cell. [antibody concentration 10 ug/ml]



Immunoprecipitation of LETM1 transfected lysate using anti-LETM1 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with LETM1 MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged LETM1 is approximately 0.03ng/ml as a capture antibody.

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