

LETM1 Antibody (monoclonal) (M03)**Mouse monoclonal antibody raised against a partial recombinant LETM1.****Catalog # AT2697a****Specification**

LETM1 Antibody (monoclonal) (M03) - Product Information

Application	IF, IP, WB, IHC, E
Primary Accession	O95202
Other Accession	NM_012318
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	83354

LETM1 Antibody (monoclonal) (M03) - 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

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.

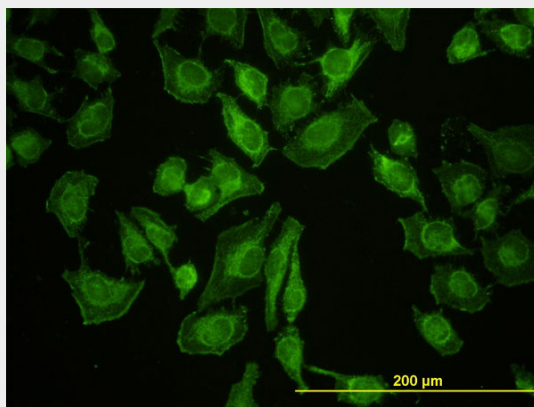
LETM1 Antibody (monoclonal) (M03) - Protocols

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

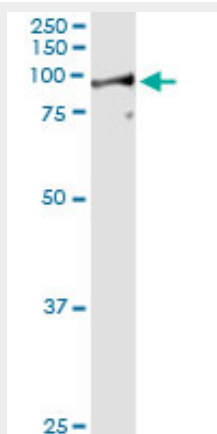
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

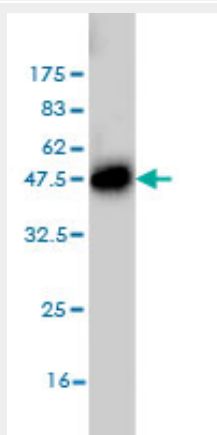
LETM1 Antibody (monoclonal) (M03) - Images



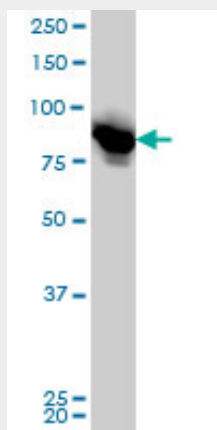
Immunofluorescence of monoclonal antibody to LETM1 on HeLa cell. [antibody concentration 10 ug/ml]



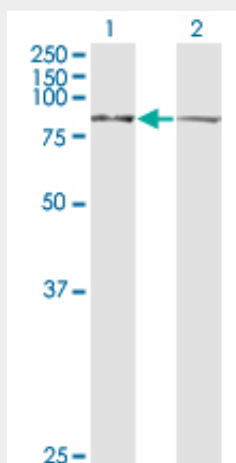
Immunoprecipitation of LETM1 transfected lysate using anti-LETM1 monoclonal antibody and Protein A Magnetic Bead ([U0007](#)), and immunoblotted with LETM1 MaxPab rabbit polyclonal antibody.



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



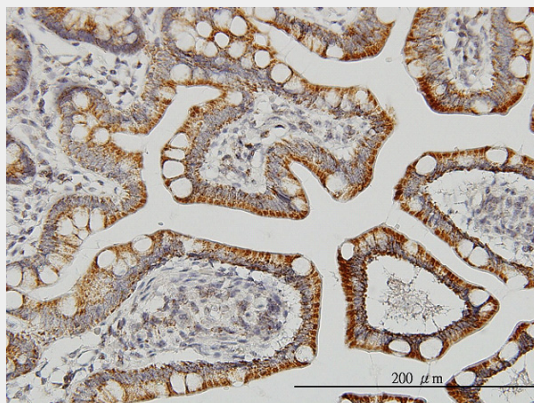
LETM1 monoclonal antibody (M03), clone 6F7 Western Blot analysis of LETM1 expression in HeLa (Cat # AT2697a)



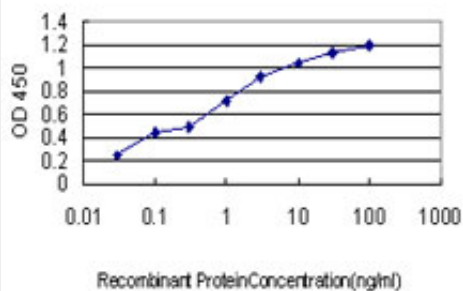
Western Blot analysis of LETM1 expression in transfected 293T cell line by LETM1 monoclonal antibody (M03), clone 6F7.

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]



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

LETM1 Antibody (monoclonal) (M03) - 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.

LETM1 Antibody (monoclonal) (M03) - 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 pages.
2. 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 MH. *Cancer Gene Ther.* 2013 Feb 8. doi: 10.1038/cgt.2013.6.3.
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, Ende S, Winterpacht A, Salviati L, Scorrano L. *Hum Mol Genet.* 2008 Jan 15;17(2):201-14. Epub 2007 Oct 9.