

# Product Datasheet

## LETM1 Antibody - BSA Free

### NBP1-33433

Unit Size: 100 ul

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**NBP1-33433**

LETM1 Antibody - BSA Free

**Product Information**

<b>Unit Size</b>	100 ul
<b>Concentration</b>	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.01% Thimerosal
<b>Isotype</b>	IgG
<b>Purity</b>	Antigen Affinity-purified
<b>Buffer</b>	0.1M Tris (pH 7), 0.1M Glycine, 10% Glycerol
<b>Target Molecular Weight</b>	83 kDa

**Product Description**

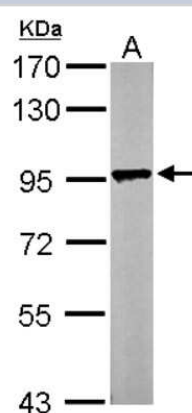
<b>Host</b>	Rabbit
<b>Gene ID</b>	3954
<b>Gene Symbol</b>	LETM1
<b>Species</b>	Human, Mouse
<b>Reactivity Notes</b>	Immunogen displays the following percentage of sequence identity for non-tested species: Rat (83%), Bovine (84%).
<b>Immunogen</b>	Recombinant protein encompassing a sequence within the C-terminus region of human LETM1. The exact sequence is proprietary.

**Product Application Details**

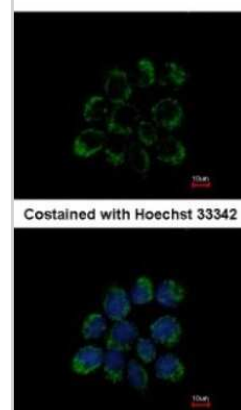
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry
<b>Recommended Dilutions</b>	Western Blot 1:500-1:3000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000

**Images**

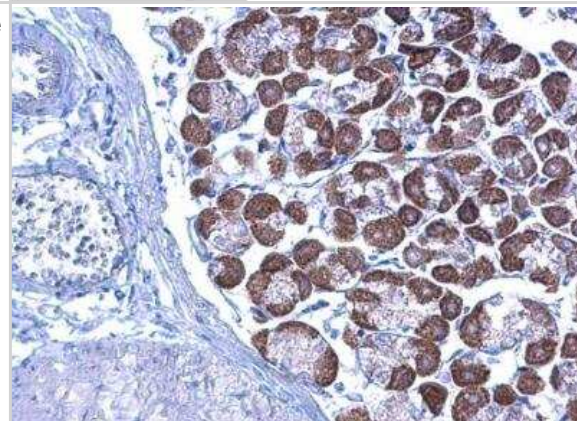
Western Blot: LETM1 Antibody [NBP1-33433] - Sample (50 ug of whole cell lysate) A: Mouse brain 7. 5% SDS PAGE; antibody diluted at 1:1000.



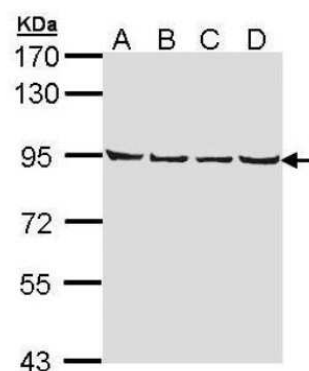
Immunocytochemistry/Immunofluorescence: LETM1 Antibody [NBP1-33433] - Analysis of methanol-fixed A431, using antibody at 1:200 dilution.



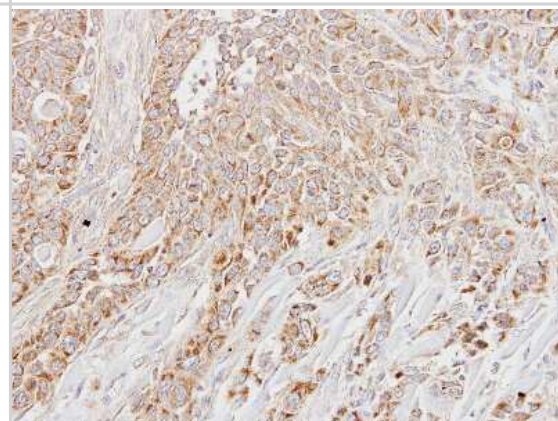
Immunohistochemistry-Paraffin: LETM1 Antibody [NBP1-33433] - Mouse stomach. LETM1 antibody diluted at 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.



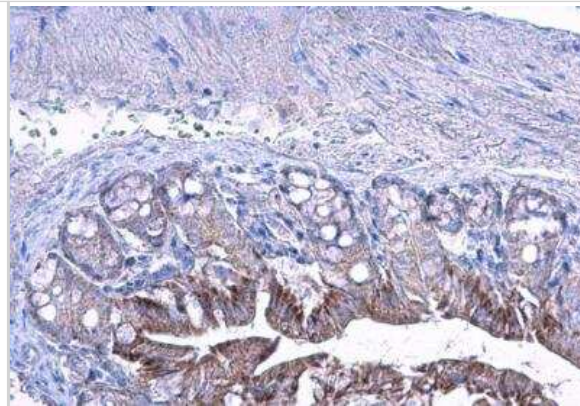
Western Blot: LETM1 Antibody [NBP1-33433] - A431 lysates (Lane A), H1299 lysates (Lane B), Hela cells (Lane C) and Hep G2 lysates (Lane D) using NBP1-33433 at a dilution of 1:1000.



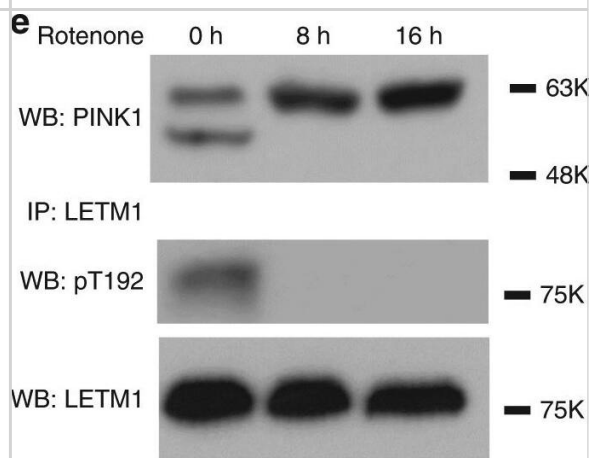
Immunohistochemistry-Paraffin: LETM1 Antibody [NBP1-33433] - HSC3 xenograft, using LETM1 antibody at 1:500 dilution. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.



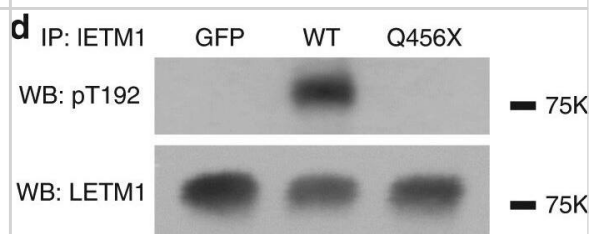
Immunohistochemistry-Paraffin: LETM1 Antibody [NBP1-33433] - Mouse colon. LETM1 antibody diluted at 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.



Deficiency or mutant PINK1 reduces phosphorylation of LETM1 at Thr192. a, b Proteins extracted from PINK1 WT or KO MEFs (a) or mouse brain (b) were subjected to IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 by WB. c Proteins extracted from human fibroblast of control (Con) or a PINK1-Q456X patient (Q456X) were subjected to IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 by WB. d HEK293 cells were transfected with Adtrack GFP control, AdPINK1-WT, & AdPINK1-Q456X mutant for 1 day. Endogenous LETM1 protein was isolated by IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 by WB. e SH-SY5Y cells were treated with 25  $\mu$ M rotenone for 8 or 16 h. Total cell lysates were either analyzed by WB with anti-PINK1, or subjected to IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 antibodies by WB. All above experiments were replicated three times, respectively Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/29123128>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

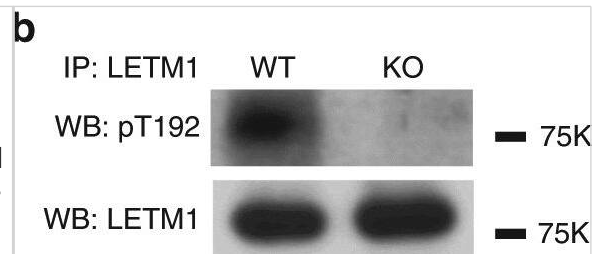


Western Blot: LETM1 Antibody [NBP1-33433] - Deficiency or mutant PINK1 reduces phosphorylation of LETM1 at Thr192. a, b Proteins extracted from PINK1 WT or KO MEFs (a) or mouse brain (b) were subjected to IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 by WB. c Proteins extracted from human fibroblast of control (Con) or a PINK1-Q456X patient (Q456X) were subjected to IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 by WB. d HEK293 cells were transfected with Adtrack GFP control, AdPINK1-WT, & AdPINK1-Q456X mutant for 1 day. Endogenous LETM1 protein was isolated by IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 by WB. e SH-SY5Y cells were treated with 25  $\mu$ M rotenone for 8 or 16 h. Total cell lysates were either analyzed by WB with anti-PINK1, or subjected to IP with anti-LETM1, probed with pT192 & reprobated with anti-LETM1 antibodies by WB. All above experiments were replicated three times, respectively Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/29123128>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

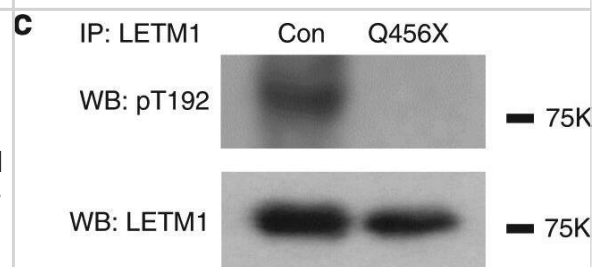




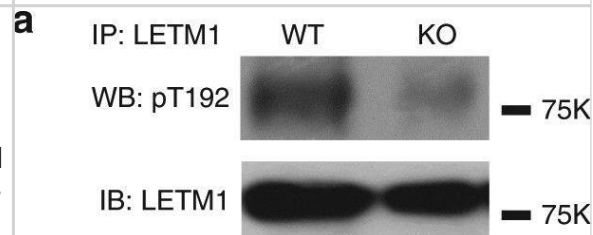
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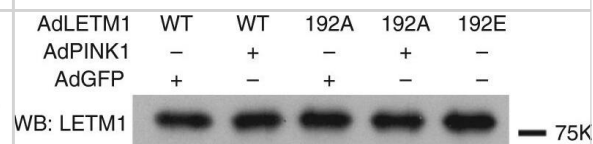
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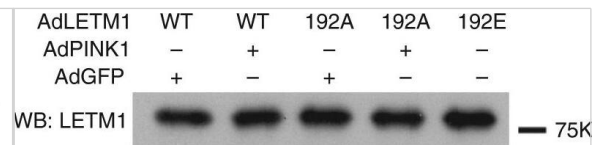
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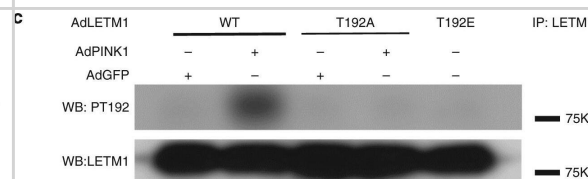
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## Publications

Huang E, Qu D et al. PINK1-mediated phosphorylation of LETM1 regulates mitochondrial calcium transport and protects neurons against mitochondrial stress. Nat Commun 2017-09-11 [PMID: 29123128] (WB, Mouse)

Aral C, Demirkesen S, Bircan R, Yasar Sirin D Melatonin reverses the oxidative stress and mitochondrial dysfunction caused by LETM1 silencing Cell Biol. Int. 2019-11-27 [PMID: 31777134] (WB, Mouse)







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Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP1-33433**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP1-89556PEP	LETM1 Recombinant Protein Antigen

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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