

Product datasheet for **TA377950**

LAMTOR1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB,1:500 - 1:1000 IHC,1:50 - 1:100 IF,1:50 - 1:100
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-161 of human LAMTOR1 (NP_060377.1).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	17kDa
Gene Name:	late endosomal/lysosomal adaptor, MAPK and MTOR activator 1
Database Link:	Entrez Gene 55004 Human Q6IAA8



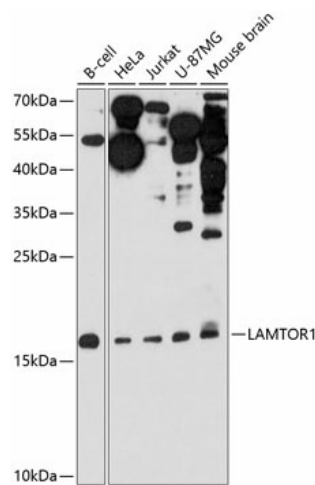
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Background:

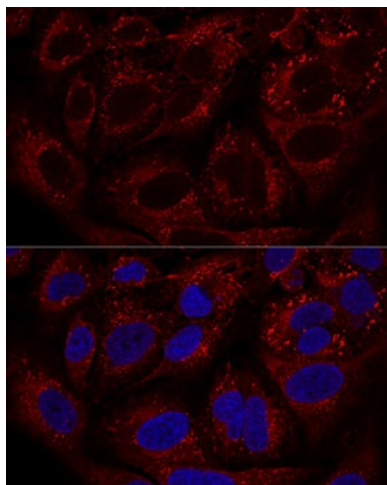
As part of the Ragulator complex it is involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids. Activated by amino acids through a mechanism involving the lysosomal V-ATPase, the Ragulator functions as a guanine nucleotide exchange factor activating the small GTPases Rag. Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated. LAMTOR1 is directly responsible for anchoring the Ragulator complex to membranes. Also required for late endosomes/lysosomes biogenesis it may regulate both the recycling of receptors through endosomes and the MAPK signaling pathway through recruitment of some of its components to late endosomes. May be involved in cholesterol homeostasis regulating LDL uptake and cholesterol release from late endosomes/lysosomes. May also play a role in RHOA activation.

Synonyms:

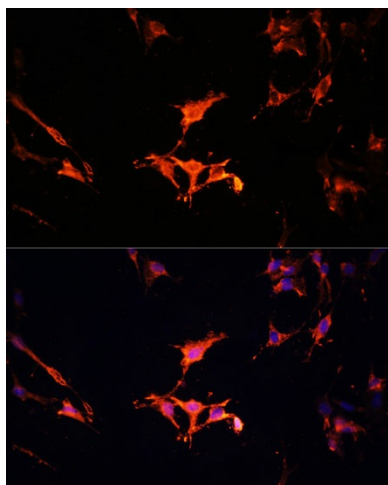
2400001E08Rik; p18; Pdro

Product images:

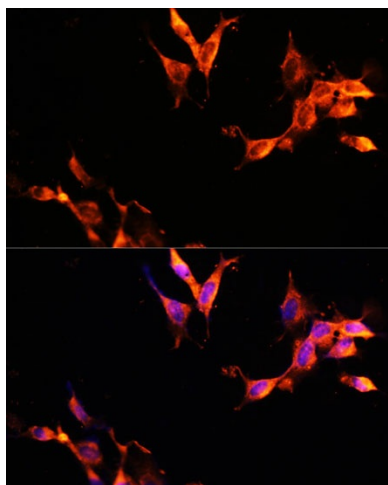
Western blot analysis of extracts of various cell lines, using LAMTOR1 antibody (TA377950) at 1:3000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Enhanced Kit. | Exposure time: 90s.



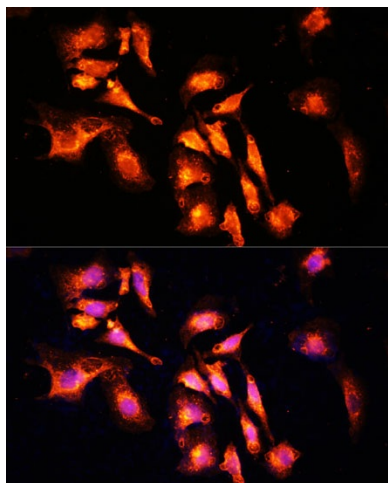
Confocal immunofluorescence analysis of U2OS cells using LAMTOR1 Polyclonal Antibody (TA377950) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of C6 cells using LAMTOR1 Polyclonal Antibody (TA377950) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH-3T3 cells using LAMTOR1 Polyclonal Antibody (TA377950) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using LAMTOR1 Polyclonal Antibody (TA377950) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.