#### For Research Use Only

# LAMTOR1 Polyclonal antibody

Catalog Number:29611-1-AP



**Purification Method:** 

WB 1:5000-1:50000 IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number: GenBank Accession Number:

29611-1-AP BC001706 GeneID (NCBI): 150ul , Concentration: 450 ug/ml by 55004

Nanodrop: **UNIPROT ID:** Q6IAA8 Rabbit Full Name:

Isotype: chromosome 11 open reading frame

IgG

Immunogen Catalog Number: Calculated MW: 161 aa, 18 kDa AG31215

> Observed MW: 18 kDa

**Applications** 

**Tested Applications:** Positive Controls:

WB, IF/ICC, ELISA WB: A431 cells, HEK-293 cells, HeLa cells, HepG2 cells, Species Specificity:

MCF-7 cells

IF/ICC: U-87 MG cells,

## **Background Information**

LAMTOR1 (Late Endosome/Lysosome-Associated Membrane Protein 1) is a membrane protein specifically localized to the surface of late endosomes/lysosomes and is involved in lysosomal transport and maturation. LAMTOR1 is a key component of the lysosomal articulating protein complex Ragulator, which is required for the localization of the  $Ragulator\ complex\ to\ ly so somes.\ LAMTOR1\ is\ a\ key\ component\ of\ the\ ly so somal\ bridging\ protein\ complex\ protein\ complex\ protein\ complex\ protein\ complex\ protein\ protein$  $Ragulator\ and\ is\ required\ for\ the\ localization\ of\ the\ Ragulator\ complex\ to\ the\ lysosome.\ LAMTOR1\ is\ involved\ in\ localization\ of\ the\ Ragulator\ complex\ to\ the\ lysosome.$ autophagy, cell growth, immune regulation, cancer development, and regulatory pathways of glucose metabolism. Recent studies have shown that in calorie restriction, lithocholic acid activates AMPK through the glucose-sensing pathway (the lysosomal pathway) and the body senses the metabolic signals induced by calorie restriction and exerts its role in slowing down the effects of aging and prolonging the lifespan, whereas deletion of LAMTOR1 results in the inability of AMPK to be activated in order to play its role.

#### Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

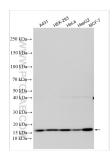
\*\*\* 20ul sizes contain 0.1% BSA

in USA), or 1(312) 455-8498 (outside USA)

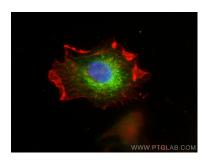
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

### **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 29611-1-AP (LAMTOR1 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed U-87 MG cells using LAMTOR1 antibody (29611-1-AP) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red).