

**ROBLD3 Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13338c****Specification**

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**ROBLD3 Antibody (Center) Blocking peptide - Product Information**Primary Accession [O9Y2Q5](#)**ROBLD3 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 28956**Other Names**

Ragulator complex protein LAMTOR2, Endosomal adaptor protein p14, Late endosomal/lysosomal Mpl-interacting protein, Late endosomal/lysosomal adaptor and MAPK and MTOR activator 2, Mitogen-activated protein-binding protein-interacting protein, MAPBP-interacting protein, Roadblock domain-containing protein 3, LAMTOR2, MAPBPIP, ROBLD3

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13338c was selected from the Center region of ROBLD3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ROBLD3 Antibody (Center) Blocking peptide - Protein Information****Name** LAMTOR2 ([HGNC:29796](#))**Synonyms** MAPBPIP, ROBLD3**Function**

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 (PubMed:<a href="http://www.uniprot.org/citations/20381137" target="\_blank">20381137</a>, PubMed:<a href="http://www.uniprot.org/citations/29123114" target="\_blank">29123114</a>, PubMed:<a href="http://www.uniprot.org/citations/29158492" target="\_blank">29158492</a>, PubMed:<a href="http://www.uniprot.org/citations/29107538" target="\_blank">29107538</a>, PubMed:<a href="http://www.uniprot.org/citations/28935770" target="\_blank">28935770</a>). Activated by amino acids through a mechanism involving the

lysosomal V-ATPase, the Ragulator plays a dual role for the small GTPases Rag (RagA/RRAGA, RagB/RRAGB, RagC/RRAGC and/or RagD/RRAGD): it (1) acts as a guanine nucleotide exchange factor (GEF), activating the small GTPases Rag and (2) mediates recruitment of Rag GTPases to the lysosome membrane (PubMed:<a href="http://www.uniprot.org/citations/22980980" target="\_blank">22980980</a>, PubMed:<a href="http://www.uniprot.org/citations/30181260" target="\_blank">30181260</a>, PubMed:<a href="http://www.uniprot.org/citations/29123114" target="\_blank">29123114</a>, PubMed:<a href="http://www.uniprot.org/citations/29158492" target="\_blank">29158492</a>, PubMed:<a href="http://www.uniprot.org/citations/29107538" target="\_blank">29107538</a>, PubMed:<a href="http://www.uniprot.org/citations/28935770" target="\_blank">28935770</a>). Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated (PubMed:<a href="http://www.uniprot.org/citations/22980980" target="\_blank">22980980</a>, PubMed:<a href="http://www.uniprot.org/citations/29123114" target="\_blank">29123114</a>, PubMed:<a href="http://www.uniprot.org/citations/29158492" target="\_blank">29158492</a>, PubMed:<a href="http://www.uniprot.org/citations/29107538" target="\_blank">29107538</a>). Adapter protein that enhances the efficiency of the MAP kinase cascade facilitating the activation of MAPK2 (By similarity).

### Cellular Location

Late endosome membrane {ECO:0000250|UniProtKB:Q9JHS3}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9JHS3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9JHS3}. Lysosome membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9JHS3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9JHS3}. Note=Recruited to lysosome and endosome membranes by LAMTOR1. {ECO:0000250|UniProtKB:Q9JHS3}

### ROBLD3 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

### ROBLD3 Antibody (Center) Blocking peptide - Images

### ROBLD3 Antibody (Center) Blocking peptide - Background

The product of this gene is highly conserved with a mouse protein associated with the cytoplasmic face of late endosomes and lysosomes. The mouse protein interacts with MAPK scaffold protein1, a component of the mitogen-activated protein kinase pathway. In humans, a mutation in this gene has been associated with a primary immunodeficiency syndrome, and suggests a role for this protein in endosomal biogenesis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

### ROBLD3 Antibody (Center) Blocking peptide - References

Sancak, Y., et al. Cell 141(2):290-303(2010) Wunderlich, W., et al. J. Cell Biol. 152(4):765-776(2001)