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ROBLD3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13338c

Specification

ROBLD3 Antibody (Center) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q9Y2Q5
Other Accession	Q3T132, NP_054736.1
Reactivity	**Human**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**13508**
Antigen Region	**41-70**

ROBLD3 Antibody (Center) - Additional Information

Gene ID 28956

Other Names
Ragulator complex protein LAMTOR2, Endosomal adaptor protein p14, Late endosomal/lysosomal Mp1-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
This ROBLD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 41-70 amino acids from the Central region of human ROBLD3.

Dilution
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ROBLD3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ROBLD3 Antibody (Center) - Protein Information

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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:20381137, PubMed:28935770, PubMed:29107538, PubMed:29123114, PubMed:29158492). 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:22980980, PubMed:28935770, PubMed:29107538, PubMed:29123114, PubMed:29158492, PubMed:30181260). Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated (PubMed:22980980, PubMed:29107538, PubMed:29123114, PubMed:29158492). Adapter protein that enhances the efficiency of the MAP kinase cascade facilitating the activation of MAPK2 (By similarity).

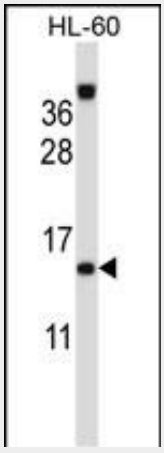
Cellular Location
Late endosome membrane {ECO:0000250|UniProtKB:Q9JHS3}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9JHS3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9JHS3}. Lysosome membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9JHS3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9JHS3}.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

ROBLD3 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ROBLD3 Antibody (Center) - Images



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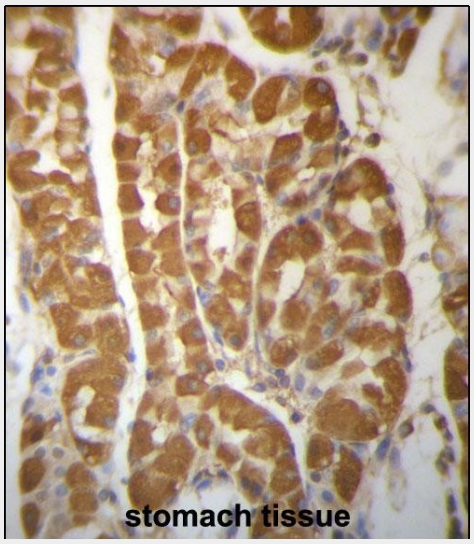
ROBLD3 Antibody (Center) (Cat. #AP13338c) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the ROBLD3 antibody detected the ROBLD3 protein (arrow).



ROBLD3 Antibody (Center) (Cat. #AP13338c)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ROBLD3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

ROBLD3 Antibody (Center) - 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 protein 1, 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) - References

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