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ROBLD3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55251

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9Y2Q5
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	13508

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
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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: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:22053050, 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}

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