



## Rabbit Anti-ROBLD3 antibody

SL13705R

<b>Product Name:</b>	ROBLD3
<b>Chinese Name:</b>	胞内接头蛋白P14抗体
<b>Alias:</b>	ENDAP; Endosomal adaptor protein p14; HSPC003; LAMTOR2; Late endosomal/lysosomal adaptor and MAPK and MTOR activator 2; Late endosomal/lysosomal Mp1 interacting protein; Late endosomal/lysosomal Mp1-interacting protein; LTOR2_HUMAN; MAPBPIP; MAPKSP1 adaptor protein; MAPKSP1AP; Mitogen activated protein binding protein interacting protein; Mitogen-activated protein-binding protein-interacting protein; p14; Ragulator complex protein LAMTOR2; Ragulator2; Roadblock domain containing 3; Roadblock domain containing protein 3; Roadblock domain-containing protein 3; ROBLD 3; RP11 336K24.9.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Cow,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	13kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human ROBLD3:3-100-125
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.

**PubMed:**

[PubMed](#)

MP1 (MEK partner 1) functions as a scaffolding protein in the mitogen activated protein (MAP) kinase signaling pathway. Growth factor induced MAP kinase activation is selectively mediated by the extracellular signal-regulated kinase (ERK) cascade. MAPBPIP (mitogen-activated protein-binding protein-interacting protein), also known as p14 and late endosomal/lysosomal MP1-interacting protein, functions as an adaptor protein augmenting the regulation of the MAP kinase cascade. Partner proteins MAPBPIP and MP1 are structurally almost identical each with a five-stranded  $\beta$ -sheet flanked between a two-helix and one-helix layer. MAPBPIP compels the recruitment of MP1 to late endosomes where they form a very stable heterodimeric complex required for ERK activation on endosomes. Knockdown of the individual proteins in the MP1/MAPBPIP complex resulted in decreased expression of the partner proteins which implies greater stability of the heterodimeric complex than either MP1 or MAPBPIP individually. Early research suggests the MP1-MAPBPIP-MEK-1 signaling complex may be critical in the regulation of tissue homeostasis.

**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. 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. Adapter protein that enhances the efficiency of the MAP kinase cascade facilitating the activation of MAPK2.

**Subcellular Location:**

Late endosome membrane. Lysosome membrane.

**Tissue Specificity:**

Defects in LAMTOR2 are the cause of immunodeficiency due to defect in MAPBP-interacting protein (ID-MAPBPIP) [MIM:610798]. This form of primary immunodeficiency syndrome includes congenital neutropenia, partial albinism, short stature and B-cell and cytotoxic T-cell deficiency.

**Similarity:**

Belongs to the GAMAD family.

**SWISS:**

Q9Y2Q5

**Gene ID:**

28956

**Database links:**

**Product Detail:**

[Entrez Gene: 28956](#) Human

[Oimim: 610389](#) Human

[SwissProt: Q9Y2Q5](#) Human

[Unigene: 632483](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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