

Anti-RHEB Rabbit Monoclonal Antibody Catalog # ABO15364

Specification

Anti-RHEB Rabbit Monoclonal Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC, IF, ICC, FC |
| Primary Accession | Q15382 |
| Host | Rabbit |
| Isotype | IgG |
| Reactivity | Human |
| Clonality | Monoclonal |
| Format | Liquid |

Description

Anti-RHEB Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications.
This antibody reacts with Human.

Anti-RHEB Rabbit Monoclonal Antibody - Additional Information

Gene ID 6009

Other Names

GTP-binding protein Rheb, Ras homolog enriched in brain, 3.6.5.-, RHEB
{ECO:0000303|PubMed:8543055, ECO:0000312|HGNC:HGNC:10011}

Calculated MW

20 kDa KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
FC 1:100

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human RHEB

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-RHEB Rabbit Monoclonal Antibody - Protein Information

Name RHEB {ECO:0000303|PubMed:8543055, ECO:0000312|HGNC:HGNC:10011}

Function

Small GTPase that acts as an allosteric activator of the canonical mTORC1 complex, an evolutionarily conserved central nutrient sensor that stimulates anabolic reactions and macromolecule biosynthesis to promote cellular biomass generation and growth (PubMed:12172553, PubMed:12271141, PubMed:12842888, PubMed:12869586, PubMed:12906785, PubMed:15340059, PubMed:15854902, PubMed:16098514, PubMed:20381137, PubMed:22819219, PubMed:24529379, PubMed:29416044, PubMed:32470140, PubMed:33157014). In response to nutrients, growth factors or amino acids, specifically activates the protein kinase activity of MTOR, the catalytic component of the mTORC1 complex: acts by causing a conformational change that allows the alignment of residues in the active site of MTOR, thereby enhancing the phosphorylation of ribosomal protein S6 kinase (RPS6KB1 and RPS6KB2) and EIF4EBP1 (4E-BP1) (PubMed:29236692, PubMed:33157014). RHEB is also required for localization of the TSC-TBC complex to lysosomal membranes (PubMed:24529379). In response to starvation, RHEB is inactivated by the TSC-TBC complex, preventing activation of mTORC1 (PubMed:24529379, PubMed:33157014). Has low intrinsic GTPase activity (PubMed:15340059).

Cellular Location

Endomembrane system; Lipid-anchor; Cytoplasmic side. Lysosome membrane; Lipid- anchor; Cytoplasmic side. Golgi apparatus membrane; Lipid-anchor; Cytoplasmic side. Endoplasmic reticulum membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm, cytosol. Note=Farnesylation is required for recruitment to lysosomal membranes, where it activates the mTORC1 complex.

Tissue Location

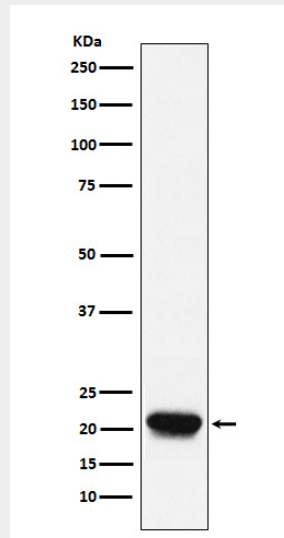
Ubiquitous (PubMed:8543055). Highest levels observed in skeletal and cardiac muscle (PubMed:8543055)

Anti-RHEB Rabbit Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-RHEB Rabbit Monoclonal Antibody - Images



Western blot analysis of RHEB expression in Raji cell lysate.