10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RRAGB Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18936A

Specification

RRAGB Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q5VZM2
Other Accession	NP_006055.3
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**43250**
Antigen Region	**1-30**

RRAGB Antibody (N-term) - Additional Information

Gene ID 10325

Other Names
Ras-related GTP-binding protein B, Rag B, RagB, RRAGB (HGNC:19901)

Target/Specificity
This RRAGB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human RRAGB.

Dilution
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
RRAGB Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RRAGB Antibody (N-term) - Protein Information

Name RRAGB (HGNC:19901)

Function Guanine nucleotide-binding protein that plays a crucial role in the cellular response to amino acid availability through regulation of the mTORC1 signaling cascade (PubMed:18497260, PubMed:20381137, PubMed:23723238, PubMed:24095279). Forms heterodimeric Rag complexes with RagC/RRAGC or RagD/RRAGD and cycles between an inactive GDP-bound and an active GTP-bound form: RagB/RRAGB is in its active form when GTP-bound RagB/RRAGB forms a complex with GDP-bound RagC/RRAGC (or RagD/RRAGD) and in an inactive form when GDP-bound RagB/RRAGB heterodimerizes with GTP-bound RagC/RRAGC (or RagD/RRAGD) (PubMed:18497260, PubMed:20381137, PubMed:23723238, PubMed:24095279). In its GTP-bound active form, promotes the recruitment of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB (PubMed:18497260, PubMed:20381137, PubMed:23723238). Involved in the RCC1/Ran-GTPase pathway (PubMed:9394008).

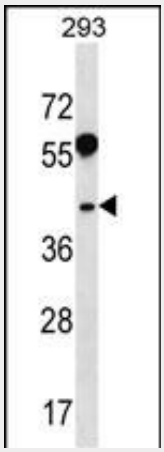
Cellular Location
Cytoplasm. Lysosome membrane. Note=Recruited to the lysosome surface by the Ragulator complex.

RRAGB Antibody (N-term) - 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

RRAGB Antibody (N-term) - Images



RRAGB Antibody (N-term) (Cat. #AP18936a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the RRAGB antibody detected the RRAGB protein (arrow).

RRAGB Antibody (N-term) - Background

Ras-homologous GTPases constitute a large family of signal transducers that alternate between an activated, GTP-binding state and an inactivated, GDP-binding state. These proteins represent cellular switches that are operated by GTP-exchange factors and

factors that stimulate their intrinsic GTPase activity. All GTPases of the Ras superfamily have in common the presence of six conserved motifs involved in GTP/GDP binding, three of which are phosphate-/magnesium-binding sites (PM1-PM3) and three of which are guanine nucleotide-binding sites (G1-G3). Transcript variants encoding distinct isoforms have been identified. [provided by RefSeq].

RRAGB Antibody (N-term) - References

Ross, M.T., et al. Nature 434(7031):325-337(2005)
Tomarev, S.I., et al. Invest. Ophthalmol. Vis. Sci. 44(6):2588-2596(2003)
Sekiguchi, T., et al. J. Biol. Chem. 276(10):7246-7257(2001)
Hirose, E., et al. J. Cell. Sci. 111 (PT 1), 11-21 (1998) :
Schurmann, A., et al. J. Biol. Chem. 270(48):28982-28988(1995)