

RRAGB Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP18936a**Specification**

RRAGB Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q5VZM2](#)**RRAGB Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 10325**Other Names**

Ras-related GTP-binding protein B, Rag B, RagB, RRAGB (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=19901)
HGNC:19901

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RRAGB Antibody (N-term) Blocking Peptide - 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](http://www.uniprot.org/citations/18497260), PubMed: [20381137](http://www.uniprot.org/citations/20381137), PubMed: [23723238](http://www.uniprot.org/citations/23723238), PubMed: [24095279](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/18497260), PubMed: [20381137](http://www.uniprot.org/citations/20381137), PubMed: [23723238](http://www.uniprot.org/citations/23723238), PubMed: [24095279](http://www.uniprot.org/citations/24095279)). In its GTP-bound active form, promotes the recruitment of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB (PubMed: [24095279](#)).

href="http://www.uniprot.org/citations/18497260" target="_blank">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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RRAGB Antibody (N-term) Blocking Peptide - Images

RRAGB Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)