

MAPKSP1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17561a**Specification**

MAPKSP1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9UHA4](#)**MAPKSP1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 8649**Other Names**

Ragulator complex protein LAMTOR3, Late endosomal/lysosomal adaptor and MAPK and MTOR activator 3, MEK-binding partner 1, Mp1, Mitogen-activated protein kinase kinase 1-interacting protein 1, Mitogen-activated protein kinase scaffold protein 1, LAMTOR3, MAP2K1IP1, MAPKSP1

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.

MAPKSP1 Antibody (N-term) Blocking Peptide - Protein Information**Name** LAMTOR3 ([HGNC:15606](#))**Synonyms** MAP2K1IP1, MAPKSP1**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](http://www.uniprot.org/citations/20381137), PubMed: [22980980](http://www.uniprot.org/citations/22980980), PubMed: [30181260](http://www.uniprot.org/citations/30181260), PubMed: [29107538](http://www.uniprot.org/citations/29107538), PubMed: [29123114](http://www.uniprot.org/citations/29123114), PubMed: [29158492](http://www.uniprot.org/citations/29158492), PubMed: [28935770](http://www.uniprot.org/citations/28935770)). 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: [22980980](http://www.uniprot.org/citations/22980980))

target="_blank">22980980, PubMed:30181260, PubMed:29107538, PubMed:29123114, PubMed:29158492, PubMed:28935770). Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated (PubMed:22980980, PubMed:30181260, PubMed:29107538, PubMed:29123114, PubMed:29158492, PubMed:28935770). 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:O88653}; Peripheral membrane protein {ECO:0000250|UniProtKB:O88653}; Cytoplasmic side {ECO:0000250|UniProtKB:O88653}.
Note=Recruited to lysosome and endosome membranes by LAMTOR1.
{ECO:0000250|UniProtKB:O88653}

MAPKSP1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MAPKSP1 Antibody (N-term) Blocking Peptide - Images

MAPKSP1 Antibody (N-term) Blocking Peptide - Background

This gene encodes a scaffold protein that functions in the extracellular signal-regulated kinase (ERK) cascade. The protein is localized to late endosomes by the mitogen-activated protein-binding protein-interacting protein, and binds specifically to MAP kinase kinase MAP2K1/MEK1, MAP kinase MAPK3/ERK1, and MAP kinase MAPK1/ERK2. Studies of the orthologous gene in mouse indicate that it regulates late endosomal traffic and cell proliferation. Multiple transcript variants are expressed by this gene, but only one variant is thought to express a protein.

MAPKSP1 Antibody (N-term) Blocking Peptide - References

Sancak, Y., et al. Cell 141(2):290-303(2010) Vomastek, T., et al. Mol. Cell. Biol. 27(23):8296-8305(2007) Brahma, A., et al. Arch. Biochem. Biophys. 460(1):85-91(2007) Teis, D., et al. J. Cell Biol. 175(6):861-868(2006) Villegas, S.N., et al. Brain Res. Bull. 71 (1-3), 116-126 (2006) :