

MAPK8IP3 Antibody (S583) Blocking Peptide
Synthetic peptide
Catalog # BP7282c**Specification**

MAPK8IP3 Antibody (S583) Blocking Peptide - Product InformationPrimary Accession [Q9UPT6](#)**MAPK8IP3 Antibody (S583) Blocking Peptide - Additional Information****Gene ID** 23162**Other Names**

C-Jun-amino-terminal kinase-interacting protein 3, JIP-3, JNK-interacting protein 3, JNK MAP kinase scaffold protein 3, Mitogen-activated protein kinase 8-interacting protein 3, MAPK8IP3, JIP3, KIAA1066

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7282c](/product/products/AP7282c) was selected from the S583 region of human MAPK8IP3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

MAPK8IP3 Antibody (S583) Blocking Peptide - Protein Information**Name** MAPK8IP3**Synonyms** JIP3, KIAA1066**Function**

The JNK-interacting protein (JIP) group of scaffold proteins selectively mediates JNK signaling by aggregating specific components of the MAPK cascade to form a functional JNK signaling module (PubMed: [12189133](http://www.uniprot.org/citations/12189133)). May function as a regulator of vesicle transport, through interactions with the JNK-signaling components and motor proteins (By similarity). Promotes neuronal axon elongation in a kinesin- and JNK-dependent manner. Activates cofilin at axon tips via local activation of JNK, thereby regulating filopodial dynamics and enhancing axon elongation. Its binding to kinesin heavy chains (KHC), promotes kinesin-1 motility along microtubules and is essential for axon elongation and

regeneration. Regulates cortical neuronal migration by mediating NTRK2/TRKB anterograde axonal transport during brain development (By similarity). Acts as an adapter that bridges the interaction between NTRK2/TRKB and KLC1 and drives NTRK2/TRKB axonal but not dendritic anterograde transport, which is essential for subsequent BDNF-triggered signaling and filopodia formation (PubMed:21775604).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q9ESN9}. Golgi apparatus {ECO:0000250|UniProtKB:Q9ESN9}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:Q9ESN9}. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9ESN9}. Cell projection, axon {ECO:0000250|UniProtKB:E9PSK7}. Cell projection, dendrite {ECO:0000250|UniProtKB:E9PSK7}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:E9PSK7}. Note=Localized in the soma and growth cones of differentiated neurites and the Golgi and vesicles of the early secretory compartment of epithelial cells. KIF5A/B/C-mediated transportation to axon tips is essential for its function in enhancing neuronal axon elongation. {ECO:0000250|UniProtKB:E9PSK7, ECO:0000250|UniProtKB:Q9ESN9}

MAPK8IP3 Antibody (S583) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MAPK8IP3 Antibody (S583) Blocking Peptide - Images

MAPK8IP3 Antibody (S583) Blocking Peptide - Background

MAPK8IP3 shares similarity with the product of Drosophila syd gene, required for the functional interaction of kinesin I with axonal cargo. Studies of the similar gene in mouse suggested that this protein may interact with, and regulate the activity of numerous protein kinases of the JNK signaling pathway, and thus function as a scaffold protein in neuronal cells. The C. elegans counterpart is found to regulate synaptic vesicle transport possibly by integrating JNK signaling and kinesin-1 transport.

MAPK8IP3 Antibody (S583) Blocking Peptide - References

Choy,K.W., Physiol. Genomics 25 (1), 9-15 (2006)Oh,J.H., Mamm. Genome 16 (12), 942-954 (2005)Takino,T., J. Biol. Chem. 280 (45), 37772-37781 (2005)