

JIP3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50843

Product Information

Application WB, IF Primary Accession Q9UPT6

Reactivity Human, Mouse

HostRabbitClonalitypolyclonalCalculated MW147457

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

Dilution WB~~ 1:1000 IF~~1:100

Format Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4,

150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°C

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). 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}

Background

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. May function as a regulator of vesicle transport, through interactions with the JNK-signaling components and motor proteins (By similarity).

References

Kikuno R.,et al.DNA Res. 6:197-205(1999).

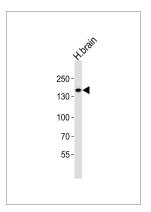
Ohara O.,et al.Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.

Hattori A.,et al.DNA Res. 7:357-366(2000).

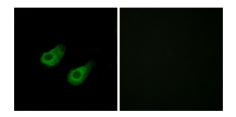
Daniels R.J.,et al.Hum. Mol. Genet. 10:339-352(2001).

Martin J.,et al.Nature 432:988-994(2004).

Images



Western blot analysis of lysate from human brain tissue lysate, using JIP3 Antibody, was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35 ug.



Immunofluorescence analysis of HeLa cells, using JIP3 antibody.

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