

JIP3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50843

Specification

JIP3 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Antigen Region WB, IF <u>Q9UPT6</u> Human, Mouse Rabbit Polyclonal 147,29 KDa 641-670

JIP3 Antibody - 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

JIP3 Antibody - 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:000250|UniProtKB:E9PSK7, ECO:0000250|UniProtKB:Q9ESN9}

JIP3 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

JIP3 Antibody - Images



Immunofluorescence analysis of HeLa cells, using JIP3 antibody.





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 35ug.

JIP3 Antibody - 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).

JIP3 Antibody - 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).