

## Anti-JIP3 Antibody

Rabbit polyclonal antibody to JIP3 Catalog # AP59816

#### Specification

# Anti-JIP3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IF/IC, IHC <u>Q9UPT6</u> <u>Q9ESN9</u> Human, Mouse, Rat, Bovine Rabbit Polyclonal 147457

## Anti-JIP3 Antibody - Additional Information

Gene ID 23162

**Other Names** JIP3; KIAA1066; 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

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the center region of human JIP3. The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# Anti-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:<a href="http://www.uniprot.org/citations/12189133" target="\_blank">12189133</a>).



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 kinesinand 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:<a href="http://www.uniprot.org/citations/21775604"">http://www.uniprot.org/citations/21775604</a>" target="\_\_blank">>21775604</a>).

**Cellular Location** 

Cytoplasm {ECO:0000250|UniProtKB:Q9ESN9}. Golgi apparatus

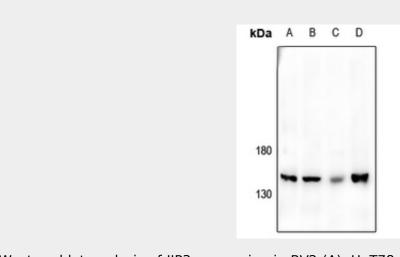
{ECO:0000250|UniProtKB:Q9ESN9}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:Q9ESN9}. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9ESN9}. Cell projection, axon {ECO:0000250|UniProtKB:E9PSK7}. Cell projection, dendrite {ECO:0000250|UniProtKB:E9PSK7}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:E9PSK7}. 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}

## Anti-JIP3 Antibody - Protocols

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

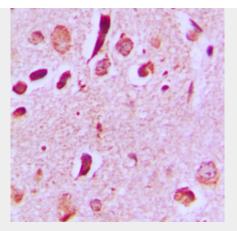
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-JIP3 Antibody - Images

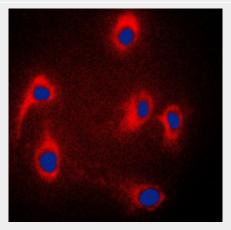


Western blot analysis of JIP3 expression in BV2 (A), HuT78 (B), Hela (C), HEK293T (D) whole cell lysates.





Immunohistochemical analysis of JIP3 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of JIP3 staining in PC12 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

# Anti-JIP3 Antibody - Background

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