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JIP-1 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10501

Specification

JIP-1 Antibody - Product Information

Application	**WB**
Primary Accession	Q9WVI9
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**77282**

JIP-1 Antibody - Additional Information

Gene ID 19099

Application & Usage	**Western blotting (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. The antibody recognizes 78 kDa JIP1 in samples from mouse, rat and human origins. In human sample, a ~110 kDa isoform can also be observed. Reactivity to other species has not been tested.**

Other Names
JIP 1 , JNK , IB1 , IB 1 , MAPK8IP 1 , MAPK8IP1 , Mitogen activated protein kinase 8 ,

Target/Specificity
JIP1

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.2mg/ml) protein A purified rabbit anti-JIP1 polyclonal antibody in phosphate-buffered saline (PBS) containing 0.5% BSA, 30% glycerol, and 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
JIP-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

JIP-1 Antibody - Protein Information

Name Mapk8ip1

Synonyms Ib1, Jip1, Mapk8ip, Prkm8ip

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. Required for JNK activation in response to excitotoxic stress. Cytoplasmic MAPK8IP1 causes inhibition of JNK-regulated activity by retaining JNK in the cytoplasm and thus inhibiting the JNK phosphorylation of c-Jun. May also participate in ApoER2-specific reelin signaling. Directly, or indirectly, regulates GLUT2 gene expression and beta-cell function. Appears to have a role in cell signaling in mature and developing nerve terminals. May function as a regulator of vesicle transport, through interactions with the JNK-signaling components and motor proteins. Functions as an anti-apoptotic protein and whose level seems to influence the beta-cell death or survival response (By similarity). Acts as a scaffold protein that coordinates with SH3RF1 in organizing different components of the JNK pathway, including RAC1 or RAC2, MAP3K11/MLK3 or MAP3K7/TAK1, MAP2K7/MKK7, MAPK8/JNK1 and/or MAPK9/JNK2 into a functional multiprotein complex to ensure the effective activation of the JNK signaling pathway. Regulates the activation of MAPK8/JNK1 and differentiation of CD8(+) T-cells (PubMed:23963642).

Cellular Location
Cytoplasm. Cytoplasm, perinuclear region. Nucleus. Endoplasmic reticulum membrane. Mitochondrion membrane Note=Accumulates in cell surface projections. Under certain stress conditions, translocates to the perinuclear region of neurons. In insulin-secreting cells, detected in both the cytoplasm and nucleus (By similarity).

Tissue Location
Expressed predominantly in the brain and insulin- secreting cells. In the brain, high expression found in the cerebral cortex and hippocampus. Localizes in the synaptic regions of the olfactory bulb, retina, cerebral and cerebellar cortex and hippocampus Also expressed in a restricted number of axons, including mossy fibers from the hippocampal dentate gyrus, soma, dendrites and axons of cerebellar Purkinje cells. Also expressed in kidney, testis and prostate. Low levels in heart, ovary and small intestine. Isoform JIP- 1b is more predominant in the brain than isoform JIP-1a. Isoform Jip1-a is expressed both in the brain and kidney, isoform JIP-1c, isoform JIP- 1d and isoform JIP-1e are brain specific

JIP-1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

JIP-1 Antibody - Images

JIP-1 Antibody - Background

JIP1 (JNK-interacting protein-1) is a cytoplasmic protein that possesses an N-terminal JNK-binding domain and a C-terminal SRC homology 3 (SH3) domain. JIP1 selectively bind to JNK, but not to the ERK or p38 MAP kinases. In addition to JNK, JIP1 binds to specific proteins of JNK pathways, including MKK7, MLK3, and DLK, all at separate binding sites. JIP1 has been identified in brain and kidney tissues, whereas JIP2a, JIP2b, and JIP3 are specifically expressed in the brain. Overexpression of JIP1 causes cytoplamic retention of JNK, thereby preventing its nuclear accumulation and the subsequent activation of the JNK pathways, indicating that JIP1 acts as a cytoplasmic anchor for JNK.