

JIP-1 Blocking Peptide

Catalog # PBV10298b

Specification

JIP-1 Blocking Peptide - Product Information

Primary Accession	<u>Q9WVI9</u>
Gene ID	19099
Calculated MW	77282

JIP-1 Blocking Peptide - Additional Information

Gene ID 19099

Application & Usage

The peptide is used for blocking the antibody activity of active JIP-1. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30 minutes at 37°C

Other Names

C-Jun-amino-terminal kinase-interacting protein 1, JIP-1, JNK-interacting protein 1, Islet-brain-1, IB-1, JNK MAP kinase scaffold protein 1, Mitogen-activated protein kinase 8-interacting protein 1, Mapk8ip1, Ib1, Jip1, Mapk8ip, Prkm8ip

Target/Specificity JIP-1

Formulation 50 μg (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

Reconstitution & Storage -20 °C

Background Descriptions

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

JIP-1 Blocking Peptide - 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:http://www.uniprot.org/citations/23963642" target=" blank">>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 Blocking Peptide - 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>
- JIP-1 Blocking Peptide Images