

JIP-1 Polyclonal Antibody

Catalog No: YT2434

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: JIP-1

Fields: >>MAPK signaling pathway

Gene Name: MAPK8IP1

Protein Name: C-Jun-amino-terminal kinase-interacting protein 1

Human Gene Id: 9479

Human Swiss Prot

Q9UQF2

No:

Mouse Gene Id: 19099

Mouse Swiss Prot

Q9WVI9

No:

Rat Gene Id: 116457

Rat Swiss Prot No: Q9R237

Immunogen: The antiserum was produced against synthesized peptide derived from human

JIP1. AA range:69-118

Specificity: JIP-1 Polyclonal Antibody detects endogenous levels of JIP-1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not

yet tested in other applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 113 78kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;

Background : This gene encodes a regulator of the pancreatic beta-cell function. It is highly

similar to JIP-1, a mouse protein known to be a regulator of c-Jun amino-terminal kinase (Mapk8). This protein has been shown to prevent MAPK8 mediated activation of transcription factors, and to decrease IL-1 beta and MAP kinase kinase 1 (MEKK1) induced apoptosis in pancreatic beta cells. This protein also functions as a DNA-binding transactivator of the glucose transporter GLUT2. RE1-silencing transcription factor (REST) is reported to repress the expression of this gene in insulin-secreting beta cells. This gene is found to be mutated in a type 2 diabetes family, and thus is thought to be a susceptibility gene for type 2

diabetes. [provided by RefSeq, May 2011],

Function: disease:Defects in MAPK8IP1 are a cause of non-insulin-dependent diabetes

mellitus (NIDDM) [MIM:125853]. NIDDM is characterized by an autosomal

dominant mode of inheritance, onset during adulthood and insulin

resistance.,domain:A minimal inhibitory domain prevents pancreatic beta cell apoptosis in vitro, and prevents activation of c-jun by MAPK8, MAPK9 and MAPK10.,domain:The destruction boxes (D-box) may act as recognition signals for degradation via the ubiquitin-proteasome pathway.,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 inhibiting JNK phosphorylation of c-

Jun. M

Subcellular Location:

Cytoplasm . Cytoplasm, perinuclear region . Nucleus . Endoplasmic reticulum membrane. Mitochondrion membrane. 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

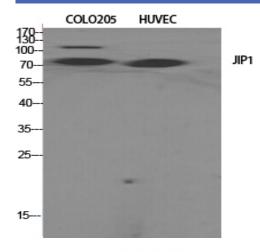
similarity)...

Expression: Highly expressed in brain. Expressed in neurons, localizing to neurite tips in

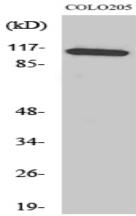
differentiating cells. Also expressed in the pancreas, testis and prostate. Low levels in heart, ovary and small intestine. Decreased levels in pancreatic beta

cells sensitize cells to IL-1-beta-induced apoptosis.

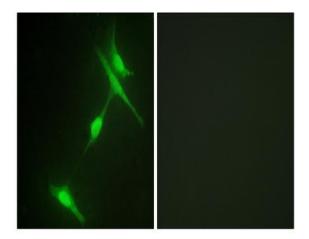
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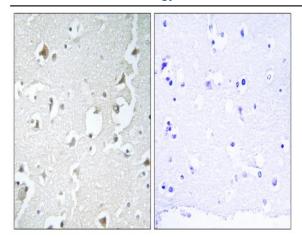
Western Blot analysis of various cells using JIP-1 Polyclonal Antibody



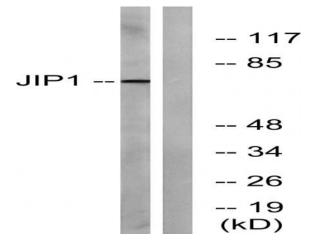
Western Blot analysis of COLO205 cells using JIP-1 Polyclonal Antibody



Immunofluorescence analysis of NIH/3T3 cells, using JIP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using JIP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO205 cells, treated with Serum 20% 15', using JIP1 Antibody. The lane on the right is blocked with the synthesized peptide.

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