

**BACKGROUND**

c-Jun NH2-terminal kinases (JNKs) are distant members of the MAP kinase family. JNK1 is activated by dual phosphorylation at a Thr-Pro-Tyr motif in response to ultraviolet (UV) light, and it functions to phosphorylate c-Jun at amino terminal serine regulatory sites, Ser-63 and Ser-73, resulting in transcriptional activation. Two additional JNK family members have been identified as JNK2 and JNK3. JIP-1 (for JNK interacting protein-1) has been identified as a cytoplasmic inhibitor of JNK that retains JNK in the cytoplasm, thereby inhibiting JNK-regulated gene expression. Evidence suggests that JNK1 and JNK2 bind to JIP-1 with greater affinity than to ATF-2 and c-Jun, which are targets of the JNK signaling pathway. JIP-1 contains an amino terminal JNK binding domain and a carboxy terminal SH3 domain. ATF-2 and c-Jun also contain the JNK binding domain and are thought to compete with JIP-1 for JNK binding. Multiple splice variants of JIP-1, including JIP-1b, JIP-1c (also designated islet-brain 1 or IB-1), JIP-2a, JIP-2b and JIP-3, have been identified in brain.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: Mapk8ip1 (mouse) mapping to 2 E1.

**SOURCE**

JIP-1 (50) is a mouse monoclonal antibody raised against amino acids 180-384 of JIP-1 of mouse origin.

**PRODUCT**

Each vial contains 50 µg IgG1 in 500 µl PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

JIP-1 (50) is recommended for detection of JIP-1 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)).

Suitable for use as control antibody for JIP-1 siRNA (m): sc-35723, JIP-1 shRNA Plasmid (m): sc-35723-SH and JIP-1 shRNA (m) Lentiviral Particles: sc-35723-V.

Molecular Weight of JIP-1: 115 kDa.

Positive Controls: mouse cerebellum extract: sc-2403, PC-12 cell lysate: sc-2250 or rat cerebellum extract: sc-2398.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.