

JIP-3 (H-140): sc-25550

BACKGROUND

The JNK-interacting proteins (JIPs) are a family of scaffold proteins that mediate JNK signaling by organizing specific components of the MAPK cascade together to form a functional JNK signaling molecule. JIP-3 (JNK-interacting protein 3), also known as JSAP1 or MAPK8IP3 (mitogen-activated protein kinase 8-interacting protein 3), is a 1,336 amino acid protein that localizes to the cytoplasm and belongs to the JIP family. Expressed in a variety of tissues, including brain and heart, JIP-3 forms homo- or heterooligomeric complexes that can interact with several components of the JNK signaling pathway, thereby functioning as a regulator of kinesin-dependent axonal transport that may also play a role in scaffold formation within neuronal cells. Human JIP-3, which may be phosphorylated upon DNA damage, shares 69% similarity with its mouse counterpart, suggesting a conserved role between species. Multiple isoforms of JIP-3 exist due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: MAPK8IP3 (human) mapping to 16p13.3; Mapk8ip3 (mouse) mapping to 17 A3.3.

SOURCE

JIP-3 (H-140) is a rabbit polyclonal antibody raised against amino acids 211-350 of JIP-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

JIP-3 (H-140) is recommended for detection of JIP-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JIP-3 (H-140) is also recommended for detection of JIP-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for JIP-3 siRNA (h): sc-37123, JIP-3 siRNA (m): sc-37124, JIP-3 shRNA Plasmid (h): sc-37123-SH, JIP-3 shRNA Plasmid (m): sc-37124-SH, JIP-3 shRNA (h) Lentiviral Particles: sc-37123-V and JIP-3 shRNA (m) Lentiviral Particles: sc-37124-V.

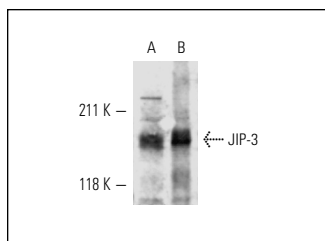
Molecular Weight of JIP-3: 147 kDa.

Positive Controls: IMR-32 Cell Lysate : sc-2409, rat brain extract: sc-2392 or PC-12 cell lysate: sc-2250.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



JIP-3 (H-140): sc-25550. Western blot analysis of JIP-3 expression in PC-12 whole cell lysate (A) and rat brain tissue extract (B).

SELECT PRODUCT CITATIONS

1. Sun, T., et al. 2013. c-Jun NH₂-terminal kinase (JNK)-interacting protein-3 (JIP3) regulates neuronal axon elongation in a kinesin- and JNK-dependent manner. *J. Biol. Chem.* 288: 14531-14543.

PROTOCOLS

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



Try **JIP-3 (F-6): sc-46663** or **JIP-3 (D-3): sc-48392**, our highly recommended monoclonal alternatives to JIP-3 (H-140).