

JIP-2 (C-20): sc-19740

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.

CHROMOSOMAL LOCATION

Genetic locus: MAPK8IP2 (human) mapping to 22q13.33; Mapk8ip2 (mouse) mapping to 15 E3.

SOURCE

JIP-2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JIP-2 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.

Blocking peptide available for competition studies, sc-19740 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JIP-2 (C-20) is recommended for detection of JIP-2 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), immunohistochemistry (including paraffin-embedded sections) (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-2 (C-20) is also recommended for detection of JIP-2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for JIP-2 siRNA (h): sc-40719, JIP-2 siRNA (m): sc-40720, JIP-2 shRNA Plasmid (h): sc-40719-SH, JIP-2 shRNA Plasmid (m): sc-40720-SH, JIP-2 shRNA (h) Lentiviral Particles: sc-40719-V and JIP-2 shRNA (m) Lentiviral Particles: sc-40720-V.

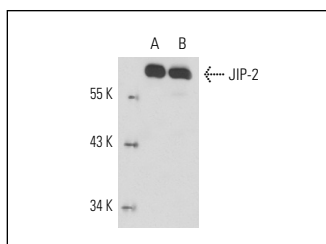
Molecular Weight of JIP-2: 88 kDa.

Positive Controls: JIP-2 (m): 293T Lysate: sc-121154, human brain tissue extract or mouse brain extract: sc-2253.

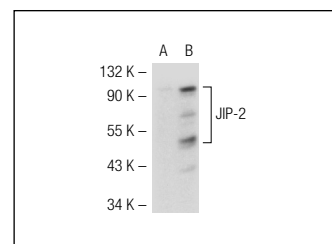
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



JIP-2 (C-20): sc-19740. Western blot analysis of JIP-2 expression in mouse brain (A) and human brain (B) tissue extracts.



JIP-2 (C-20): sc-19740. Western blot analysis of JIP-2 expression in non-transfected: sc-117752 (A) and mouse JIP-2 transfected: sc-121154 (B) 293T whole cell lysates.

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.

PROTOCOLS

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



Try **JIP-2 (A-9): sc-377490** or **JIP-2 (C-10): sc-398926**, our highly recommended monoclonal alternatives to JIP-2 (C-20).