

JIP-4 (E-20): sc-67648

BACKGROUND

JIP-4 (c-Jun-amino-terminal kinase-interacting protein 4, Mitogen-activated protein kinase 8-interacting protein 4, Sunday driver 1) is a 1,321 amino acid protein encoded by the human gene SPAG9. It contains a large N-terminal extracellular domain, a short transmembrane helical domain, and a cytoplasmic domain. There are six N-glycosylation sites, several phosphorylation sites for cAMP/cGMP-dependent protein kinase, protein kinase C and casein kinase II, and ten putative myristoylation sites. There is also a leucine zipper motif, with six leucine repeats, that may aid in dimerization since there is no upstream basic domain characteristic of DNA binding proteins. 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. JIP-4 is a cytoplasmic, perinuclear protein that has eight known isoforms whose expression varies by tissue and disease state.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SPAG9 (human) mapping to 17q21.33; Spag9 (mouse) mapping to 11 D.

SOURCE

JIP-4 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JIP-4 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-67648 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JIP-4 (E-20) is recommended for detection of JIP-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-4 (E-20) is also recommended for detection of JIP-4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for JIP-4 siRNA (h): sc-62513, JIP-4 siRNA (m): sc-62514, JIP-4 shRNA Plasmid (h): sc-62513-SH, JIP-4 shRNA Plasmid (m): sc-62514-SH, JIP-4 shRNA (h) Lentiviral Particles: sc-62513-V and JIP-4 shRNA (m) Lentiviral Particles: sc-62514-V.

Molecular Weight (predicted) of JIP-4: 147 kDa.

Molecular Weight (observed) of JIP-4: 177 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or AML-193 whole cell lysate.

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) 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.

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.



Try **JIP-4 (H-8): sc-271492**, our highly recommended monoclonal alternative to JIP-4 (E-20).