

StIp1 (P-16): sc-15276

BACKGROUND

One member of the STAT family, Stat3, participates in a wide range of biological processes including nephrogenesis, gliogenesis, hepatogenesis, T cell proliferation, inflammation and oncogenesis. Many of these responses are triggered by the IL-6 family of cytokines, which transduce their vital signals through a common gp130 receptor chain. A novel Stat3-Interacting Protein, StIP1, contains 12 WD40 repeats, which mediate protein-protein interactions. StIP1 exhibits an affinity for members of the JNK family and may play a specific role in regulating Stat3 activation. Overexpression of StIP1 blocks Stat3 activation, nuclear translocation and Stat3-dependent induction of a reporter gene, suggesting that StIP1 regulates the ligand-dependent activation of Stat3, probably by serving as a scaffold protein that promotes the interaction between JNK and the Stat3 substrate. Because StIP1 can associate with several other members of the Stat family, it may serve a broad role in cytokine-signaling events.

REFERENCES

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3. Boccaccio, C., et al. 1998. Induction of epithelial tubules by growth factor HGF depends on the STAT pathway. *Nature* 391: 285-288.
4. Bromberg, J.F., et al. 1999. Stat3 as an oncogene. *Cell* 98: 295-303.
5. Barasch, J., et al. 1999. Mesenchymal to epithelial conversion in rat metanephros is induced by LIF. *Cell* 99: 377-386.
6. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. *Trends Biochem. Sci.* 24: 181-185.
7. Sano, S., et al. 2000. Keratinocyte-specific ablation of Stat3 exhibits impaired skin remodeling, but does not affect skin morphogenesis. *EMBO J.* 18: 4657-4668.
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CHROMOSOMAL LOCATION

Genetic locus: Elp2 (mouse) mapping to 18 A2.

SOURCE

StIp1 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of StIp1 of mouse 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-15276 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

StIp1 (P-16) is recommended for detection of StIp1 of mouse and rat 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).

StIP1 (P-16) is also recommended for detection of StIP1 in additional species, including bovine and porcine.

Suitable for use as control antibody for StIP1 siRNA (m): sc-44437, StIP1 shRNA Plasmid (m): sc-44437-SH and StIP1 shRNA (m) Lentiviral Particles: sc-44437-V.

Molecular Weight of StIp1: 93 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, NIH/3T3 nuclear extract: sc-2138 or c4 whole cell lysate: sc-364186.

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.

PROTOCOLS

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



Try **StIP1 (C-5): sc-393475**, our highly recommended monoclonal alternative to StIP1 (P-16).