SANTA CRUZ BIOTECHNOLOGY, INC.

StIP1 (D-15): sc-69007

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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2. Bonni, A., Sun, Y., Nadal-Vicens, M., Bhatt, A., Frank, D.A., Rozovosky, I., Stahl, N., Yancopoulos, G.D. and Greenberg, M.E. 1997. Regulation of gliogenesis in the central nervous system by the JAK-Stat signaling pathway. Science 278: 477-483.
3. Boccaccio, C., Ando, M., Tamagnone, L., Bardelli, A., Michieli, P., Attistini, C. and Comoglio, P.M. 1998. Induction of epithelial tubules by growth factor HGF depends on the Stat pathway. Nature 391: 285-288.
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5. Barasch, J., Yang, J., Ware, C.B., Taga, T., Yoshida, K., Erdjument-Bromage, H., Tempst, P., Parravicini, E., Malach, S., Aranoff, T., et al. 1999. Mesenchymal to epithelial conversion in rat metanephros is induced by LIF. Cell 99: 377-386.
6. Smith, T.F., Gaitatzes, C., Saxena, K. and Neer, E.J. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.

CHROMOSOMAL LOCATION

Genetic locus: ELP2 (human) mapping to 18q12.2; Elp2 (mouse) mapping to 18 A2.

SOURCE

StIP1 (D-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of StIP1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69007 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

StIP1 (D-15) is recommended for detection of StIP1 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).

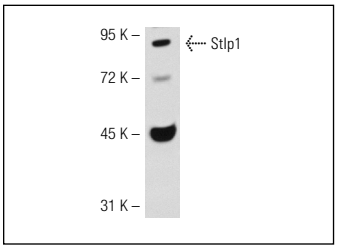
StIP1 (D-15) is also recommended for detection of StIP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for StIP1 siRNA (h): sc-44436, StIP1 siRNA (m): sc-44437, StIP1 shRNA Plasmid (h): sc-44436-SH, StIP1 shRNA Plasmid (m): sc-44437-SH, StIP1 shRNA (h) Lentiviral Particles: sc-44436-V 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 HeLa nuclear extract: sc-2120.

DATA



StIP1 (D-15): sc-69007. Western blot analysis of StIP1 expression in RAW 264.7 whole cell lysate.

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.