SANTA CRUZ BIOTECHNOLOGY, INC.

SOCS-1 (H-93): sc-9021



BACKGROUND

The SOCS (suppressor of cytokine signaling) gene family consists of a group of proteins that negatively regulate cytokine signal transduction. The SOCS family proteins contain a central SH2 domain and a carboxy-terminal region termed the "SOCS box." The SOCS-1 (also called SSI-1 and JAB), SOCS-2 (also called SSI-2 and CIS2) and SOC-3 (also called SSI-3 and CIS3) genes are known to be upregulated by IL-6 and other cytokines. SOCS-4, SOCS-5, SOCS-6 and SOCS-7 were identified by their sequence homology with the SOCS box. CIS (for cytokine-inducible SH2-containing protein) is also a member of the SOCS family.

CHROMOSOMAL LOCATION

Genetic locus: SOCS1 (human) mapping to 16p13.13; Socs1 (mouse) mapping to 16 A1.

SOURCE

SOCS-1 (H-93) is a rabbit polyclonal antibody raised against amino acids 119-211 of SOCS-1 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.

APPLICATIONS

SOCS-1 (H-93) is recommended for detection of SOCS-1 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).

SOCS-1 (H-93) is also recommended for detection of SOCS-1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for SOCS-1 siRNA (h): sc-40996, SOCS-1 siRNA (m): sc-40997, SOCS-1 shRNA Plasmid (h): sc-40996-SH, SOCS-1 shRNA Plasmid (m): sc-40997-SH, SOCS-1 shRNA (h) Lentiviral Particles: sc-40996-V and SOCS-1 shRNA (m) Lentiviral Particles: sc-40997-V.

Molecular Weight of SOCS-1: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, JAR cell lysate: sc-2276 or mouse PBL whole cell lysate.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

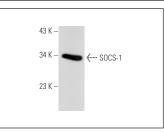
PROTOCOLS

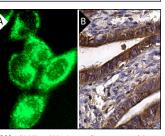
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

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

DATA





SOCS-1 (H-93): sc-9021. Western blot analysis of SOCS-1 expression in mouse PBL whole cell lysate.

SOCS-1 (H-93): sc-9021. Immunofluorescence staining of methanol-fixed IFN- γ treated HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

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- 3. Balabanov, R., et al. 2006. Suppressor of cytokine signaling 1 expression protects oligodendrocytes from the deleterious effects of interferon- γ . J. Neurosci. 26: 5143-5152.
- 4. Isomäki, P., et al. 2007. The expression of SOCS is altered in rheumatoid arthritis. Rheumatology 46: 1538-1546.
- 5. Ryo, A., et al. 2008. SOCS1 is an inducible host factor during HIV-1 infection and regulates the intracellular trafficking and stability of HIV-1 G_{$\alpha\gamma$}. Proc. Natl. Acad. Sci. USA 105: 294-299.
- Kan-Sutton, C., et al. 2009. Trehalose 6,6'-dimycolate on the surface of *Mycobacterium tuberculosis* modulates surface marker expression for antigen presentation and costimulation in murine macrophages. Microbes Infect. 11: 40-48.
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- Deng, J.Y., et al. 2010. STAT-3 correlates with lymph node metastasis and cell survival in gastric cancer. World J. Gastroenterol. 16: 5380-5387.
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- Zafra, M.P., et al. 2012. Misregulation of suppressors of cytokine signaling in eosinophilic esophagitis. J. Gastroenterol. 48: 910-920.