

# SOCS-3 (H-103): sc-9023

## 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 SOCS-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: SOCS3 (human) mapping to 17q25.3; Socs3 (mouse) mapping to 11 E2.

## SOURCE

SOCS-3 (H-103) is a rabbit polyclonal antibody raised against amino acids 87-189 of SOCS-3 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-3 (H-103) is recommended for detection of SOCS-3 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-3 (H-103) is also recommended for detection of SOCS-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SOCS-3 siRNA (h): sc-41000, SOCS-3 siRNA (m): sc-41001, SOCS-3 siRNA (r): sc-270156, SOCS-3 shRNA Plasmid (h): sc-41000-SH, SOCS-3 shRNA Plasmid (m): sc-41001-SH, SOCS-3 shRNA Plasmid (r): sc-270156-SH, SOCS-3 shRNA (h) Lentiviral Particles: sc-41000-V, SOCS-3 shRNA (m) Lentiviral Particles: sc-41001-V and SOCS-3 shRNA (r) Lentiviral Particles: sc-270156-V.

Molecular Weight of SOCS-3: 30 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HeLa + IL-6 cell lysate: sc-24687 or A549 cell lysate: sc-2413.

## RESEARCH USE

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

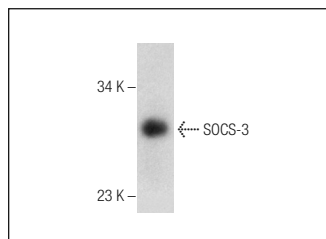
## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

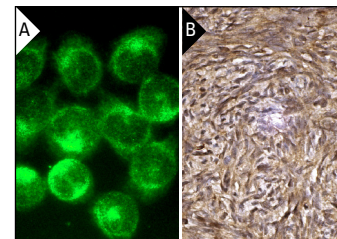
## STORAGE

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

## DATA



SOCS-3 (H-103): sc-9023. Western blot analysis of SOCS-3 expression in human PBL whole cell lysate.



SOCS-3 (H-103): sc-9023. Immunofluorescence staining of methanol-fixed HeLa + IFN- $\gamma$  cells showing cytoplasmic localization (A). Immunoperoxidase stain of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic staining of ovarian stroma cells (B).

## SELECT PRODUCT CITATIONS

- Huang, K.C., et al. 2003. Statins induce suppressor of cytokine signaling-3 in macrophages. *FEBS Lett.* 555: 385-389.
- Chen, M.C., et al. 2010. Involvement of cAMP in nerve growth factor-triggered p35/Cdk5 activation and differentiation in PC12 cells. *Am. J. Physiol., Cell Physiol.* 299: C516-C527.
- Ying, M., et al. 2010. Loss of SOCS3 expression is associated with an increased risk of recurrent disease in breast carcinoma. *J. Cancer Res. Clin. Oncol.* 136: 1617-1626.
- Arruda, A.P., et al. 2011. Low-grade hypothalamic inflammation leads to defective thermogenesis, insulin resistance, and impaired insulin secretion. *Endocrinology* 152: 1314-1326.
- Palianopoulou, M., et al. 2011. The activation of leptin-mediated survivin is limited by the inducible suppressor SOCS-3 in MCF-7 cells. *Exp. Biol. Med.* 236: 70-76.
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- Lewkowicz, N., et al. 2013. Neutrophil-CD4<sup>+</sup>CD25<sup>+</sup> T regulatory cell interactions: A possible new mechanism of infectious tolerance. *Immunobiology* 218: 455-464.


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Try **SOCS-3 (6A463): sc-73045**, our highly recommended monoclonal alternative to SOCS-3 (H-103).