

SOCS-5 (M-300): sc-5607

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.

REFERENCES

1. Yoshimura, A., Ohkubo, T., Kiguchi, T., Jenkins, N.A., Gilbert, D.J., Copeland, N.G., Hara, T. and Miyajima, A. 1995. A novel cytokine-inducible gene CIS encodes an SH2-containing protein that binds to tyrosine-phosphorylated interleukin 3 and erythropoietin receptors. *EMBO J.* 14: 2816-2826.
2. Matsumoto, A., Masuhara, M., Mitsui, K., Yokouchi, M., Ohtsubo, M., Misawa, H., Miyajima, A. and Yoshimura, A. 1997. CIS, a cytokine inducible SH2 protein, is a target of the JAK-STAT5 pathway and modulates STAT5 activation. *Blood* 89: 3148-3154.

CHROMOSOMAL LOCATION

Genetic locus: SOCS5 (human) mapping to 2p21; Socs5 (mouse) mapping to 17 E4.

SOURCE

SOCS-5 (M-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of SOCS-5 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.

APPLICATIONS

SOCS-5 (M-300) is recommended for detection of SOCS-5 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SOCS-5 (M-300) is also recommended for detection of SOCS-5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SOCS-5 siRNA (h): sc-41002, SOCS-5 siRNA (m): sc-41003, SOCS-5 shRNA Plasmid (h): sc-41002-SH, SOCS-5 shRNA Plasmid (m): sc-41003-SH, SOCS-5 shRNA (h) Lentiviral Particles: sc-41002-V and SOCS-5 shRNA (m) Lentiviral Particles: sc-41003-V.

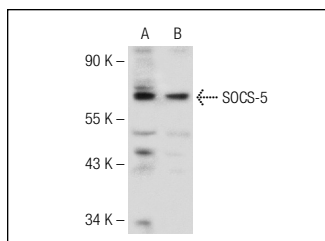
Molecular Weight of SOCS-5: 69 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, Raji whole cell lysate or Jurkat whole cell lysate: sc-2204.

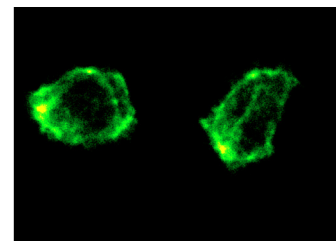
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SOCS-5 (M-300): sc-5607. Western blot analysis of SOCS-5 expression in BJAB (A) and Raji (B) whole cell lysates



SOCS-5 (M-300): sc-5607. Immunofluorescence staining of methanol-fixed RAW 264.7 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Huang, K.C., et al. 2003. Statins induce suppressor of cytokine signaling-3 in macrophages. *FEBS Lett.* 555: 385-389.

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.



Try **SOCS-5 (31-L): sc-100858**, our highly recommended monoclonal alternative to SOCS-5 (M-300).