

SOCS-7 (H-112): sc-5609

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., et al. 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., et al. 1997. CIS, a cytokine inducible SH2 protein, is a target of the JAK-STAT5 pathway and modulates STAT5 activation. *Blood* 89: 3148-3154.
3. Starr, R., et al. 1997. A family of cytokine-inducible inhibitors of signalling. *Nature* 387: 917-921.

CHROMOSOMAL LOCATION

Genetic locus: SOCS7 (human) mapping to 17q12; Socs7 (mouse) mapping to 11 D.

SOURCE

SOCS-7 (H-112) is a rabbit polyclonal antibody raised against amino acids 73-184 near the N-terminus of SOCS-7 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-7 (H-112) is recommended for detection of SOCS-7 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).

Suitable for use as control antibody for SOCS-7 siRNA (h): sc-41004, SOCS-7 siRNA (m): sc-41005, SOCS-7 shRNA Plasmid (h): sc-41004-SH, SOCS-7 shRNA Plasmid (m): sc-41005-SH, SOCS-7 shRNA (h) Lentiviral Particles: sc-41004-V and SOCS-7 shRNA (m) Lentiviral Particles: sc-41005-V.

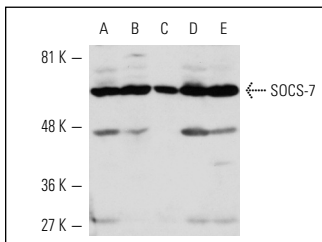
Molecular Weight of SOCS-7: 60 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or HL-60 whole cell lysate: sc-2209.

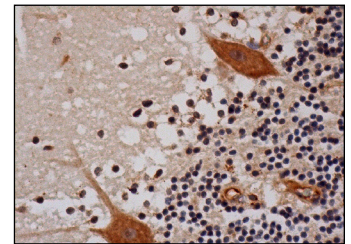
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



SOCS-7 (H-112): sc-5609. Western blot analysis of SOCS-7 expression in IL-6-treated HeLa (A), MCF7 (B), IFN-γ-treated HL-60 (C), Raji (D) and IL-2-treated Jurkat (E) whole cell lysates.



SOCS-7 (H-112): sc-5609. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing cytoplasmic staining of Purkinje cells and cytoplasmic and nuclear staining of cells in granular layer and cells in molecular layer.

SELECT PRODUCT CITATIONS

1. Paziienza, V., et al. 2007. The hepatitis C virus core protein of genotypes 3a and 1b downregulates Insulin receptor substrate 1 through genotype-specific mechanisms. *Hepatology* 45: 1164-1171.

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-7 (E-8): sc-137241**, our highly recommended monoclonal alternative to SOCS-7 (H-112).