

SOCS-6 (G-3): sc-74597

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.
4. Nicholson, S.E. and Hilton, D.J. 1998. The SOCS proteins: a new family of negative regulators of signal transduction. *J. Leukoc. Biol.* 63: 665-668.
5. Hilton, D.J., et al. 1998. Twenty proteins containing a C-terminal SOCS box form five structural classes. *Proc. Natl. Acad. Sci. USA* 95: 114-119.

CHROMOSOMAL LOCATION

Genetic locus: SOCS6 (human) mapping to 18q22.2; Socs6 (mouse) mapping to 18 E4.

SOURCE

SOCS-6 (G-3) is a mouse monoclonal antibody raised against amino acids 132-382 of SOCS-6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SOCS-6 (G-3) is available conjugated to agarose (sc-74597 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74597 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74597 PE), fluorescein (sc-74597 FITC), Alexa Fluor[®] 488 (sc-74597 AF488), Alexa Fluor[®] 546 (sc-74597 AF546), Alexa Fluor[®] 594 (sc-74597 AF594) or Alexa Fluor[®] 647 (sc-74597 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-74597 AF680) or Alexa Fluor[®] 790 (sc-74597 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

SOCS-6 (G-3) is recommended for detection of SOCS-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for SOCS-6 siRNA (h): sc-36520, SOCS-6 siRNA (m): sc-36521, SOCS-6 shRNA Plasmid (h): sc-36520-SH, SOCS-6 shRNA Plasmid (m): sc-36521-SH, SOCS-6 shRNA (h) Lentiviral Particles: sc-36520-V and SOCS-6 shRNA (m) Lentiviral Particles: sc-36521-V.

Molecular Weight (predicted) of SOCS-6: 60 kDa.

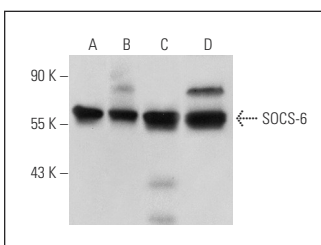
Molecular Weight (observed) of SOCS-6: 62-82 kDa.

Positive Controls: SOCS-6 (h): CHO Lysate: sc-110015, BJAB whole cell lysate: sc-2207 or KNRK whole cell lysate: sc-2214.

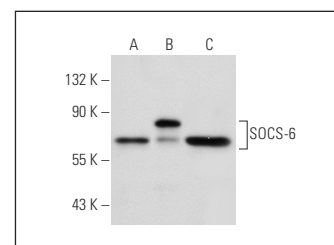
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



SOCS-6 (G-3): sc-74597. Western blot analysis of SOCS-6 expression in BJAB (A), MES-SA/Dx5 (B), Y79 (C) and KNRK (D) whole cell lysates.



SOCS-6 (G-3): sc-74597. Western blot analysis of SOCS-6 expression in non-transfected CHO: sc-117750 (A), human SOCS-6 transfected CHO: sc-110015 (B) and BJAB (C) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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