SANTA CRUZ BIOTECHNOLOGY, INC.

SOCS-6 (B-11): sc-133058

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

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.

CHROMOSOMAL LOCATION

Genetic locus: SOCS6 (human) mapping to 18q22.2.

SOURCE

SOCS-6 (B-11) is a mouse monoclonal antibody raised against amino acids 132-382 of SOCS-6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SOCS-6 (B-11) is recommended for detection of SOCS-6 of 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 shRNA Plasmid (h): sc-36520-SH and SOCS-6 shRNA (h) Lentiviral Particles: sc-36520-V.

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

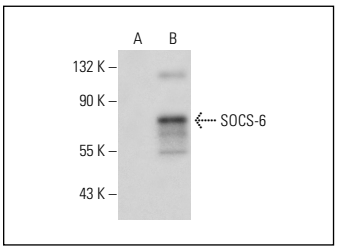
Molecular Weight (observed) of SOCS-6: 62-82 kDa.

Positive Controls: SOCS-6 (h): CHO Lysate: sc-110015, BJAB whole cell lysate: sc-2207 or Ramos cell lysate: sc-2216.

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 (B-11): sc-133058. Western blot analysis of SOCS-6 expression in non-transfected: sc-117750 (**A**) and human SOCS-6 transfected: sc-110015 (**B**) CHO whole cell lysates.

SELECT PRODUCT CITATIONS

1. Zhu, J.G., et al. 2013. Expression of SOCSs in human prostate cancer and their association in prognosis. Mol. Cell. Biochem. 381: 51-59.
2. Letellier, E., et al. 2014. Identification of SOCS2 and SOCS6 as biomarkers in human colorectal cancer. Br. J. Cancer 111: 726-735.
3. Yuan, D., et al. 2018. SOCS6 functions as a tumor suppressor by inducing apoptosis and inhibiting angiogenesis in human prostate cancer. Curr. Cancer Drug Targets 18: 894-904.

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 for detailed protocols and support products.