

SOCS-4 (9J12): sc-135566

BACKGROUND

Members of the suppressor of cytokine signaling (SOCS) family of proteins contain C-terminal regions of homology called the SOCS box, which serves to couple SOCS proteins and their binding partners with the Elongin B/C complex. Several other families of proteins also contain SOCS boxes, but differ from the SOCS proteins in the type of domain they contain upstream of the SOCS box. SOCS-4 (suppressor of cytokine signaling 4), also known as SOCS7, is a 440 amino acid protein that contains one SH2 domain and one SOCS box domain, the latter of which mediates interaction with the Elongin B/C complex. Involved in the pathway of protein modification, SOCS-4 exhibits E3 ubiquitin-protein ligase activity and functions to mediate the ubiquitination and subsequent proteasomal degradation of target proteins.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SOCS4 (human) mapping to 14q22.2.

SOURCE

SOCS-4 (9J12) is a mouse monoclonal antibody raised against recombinant SOCS-4 protein of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SOCS-4 (9J12) is recommended for detection of SOCS-4 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SOCS-4 siRNA (h): sc-63050, SOCS-4 shRNA Plasmid (h): sc-63050-SH and SOCS-4 shRNA (h) Lentiviral Particles: sc-63050-V.

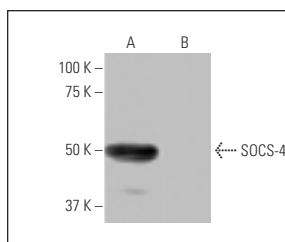
Molecular Weight of SOCS-4: 51 kDa.

Positive Controls: human SOCS-4 transfected 293T whole cell lysate or human heart extract: sc-363763.

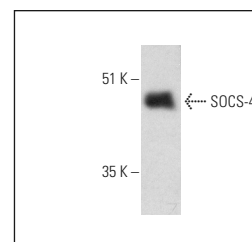
RECOMMENDED SUPPORT REAGENTS

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).

DATA



SOCS-4 (9J12): sc-135566. Western blot analysis of SOCS-4 expression in human SOCS-4 transfected (A) and non-transfected (B) 293T whole cell lysates.



SOCS-4 (9J12): sc-135566. Western blot analysis of SOCS-4 expression in human heart tissue extract.

SELECT PRODUCT CITATIONS

- Fu, B., Lin, X., Tan, S., Zhang, R., Xue, W., Zhang, H., Zhang, S., Zhao, Q., Wang, Y., Feldman, K., Shi, L., Zhang, S., Nian, W., Chaitanya Pavani, K., Li, Z., Wang, X. and Wu, H. 2021. MiR-342 controls *Mycobacterium tuberculosis* susceptibility by modulating inflammation and cell death. *EMBO Rep.* 22: e52252.

STORAGE

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