

SOCS1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8790A

Specification

SOCS1 Antibody (N-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB, FC, IF, IHC-P,E <u>O15524</u> Mouse, Rat Rabbit Polyclonal Rabbit IgG 35-66

SOCS1 Antibody (N-term) - Additional Information

Gene ID 8651

Other Names Suppressor of cytokine signaling 1, SOCS-1, JAK-binding protein, JAB, STAT-induced STAT inhibitor 1, SSI-1, Tec-interacting protein 3, TIP-3, SOCS1, SSI1, TIP3

Target/Specificity

This SOCS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 35-66 amino acids from the N-terminal region of human SOCS1.

Dilution WB~~1:2000 FC~~1:10~50 IF~~1:10~50 IHC-P~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SOCS1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SOCS1 Antibody (N-term) - Protein Information

Name SOCS1



Synonyms SSI1, TIP3 {ECO:0000303|PubMed:9341160}

Function Essential negative regulator of type I and type II interferon (IFN) signaling, as well as that of other cytokines, including IL2, IL4, IL6 and leukemia inhibitory factor (LIF) (PubMed:<u>32499645</u>, PubMed:<u>33087723</u>). Downregulates cytokine signaling by inhibiting the JAK/STAT signaling pathway. Acts by binding to JAK proteins and to IFNGR1 and inhibiting their kinase activity. In vitro, suppresses Tec protein-tyrosine activity (PubMed:<u>9341160</u>). Regulates IFN-gamma (IFNG)- mediated sensory neuron survival (By similarity). Probable substrate recognition component of an ECS (Elongin BC-CUL2/5-SOCS-box protein) E3 ubiquitin ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:<u>11278610</u>, PubMed:<u>11313480</u>).

Cellular Location

Nucleus. Cytoplasmic vesicle. Note=Detected in perinuclear cytoplasmic vesicles upon interaction with FGFR3

Tissue Location

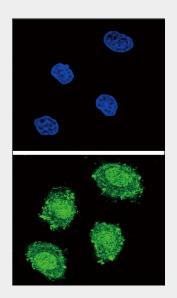
Expressed in all tissues with high expression in spleen, small intestine and peripheral blood leukocytes

SOCS1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

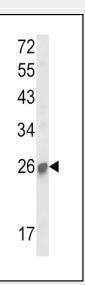
SOCS1 Antibody (N-term) - Images



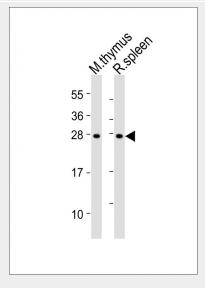
Confocal immunofluorescent analysis of SOCS1 Antibody (N-term) (Cat. #AP8790a) with 293 cell followed by Alexa Fluor[]?488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the



cell nuclear (blue).

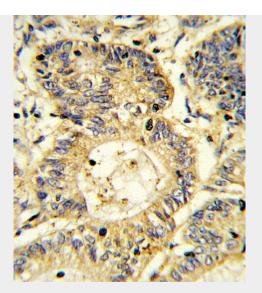


Western blot analysis of SOCS1 Antibody (N-term) (Cat. #AP8790a) in mouse kidney tissue lysates (35ug/lane). SOCS1 (arrow) was detected using the purified Pab.

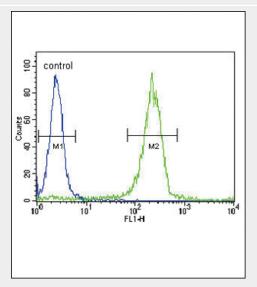


All lanes : Anti-SOCS1 Antibody (N-term) at 1:2000 dilution Lane 1: mouse thymus lysates Lane 2: rat spleen lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human colon carcinoma reacted with SOCS1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



SOCS1 Antibody (N-term) (Cat. #AP8790a) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

SOCS1 Antibody (N-term) - Background

SOCS1 is a member of the STAT-induced STAT inhibitor (SSI), also known as suppressor of cytokine signaling(SOCS), family. SSI family members are cytokine-inducible negative regulators of cytokine signaling.

SOCS1 Antibody (N-term) - References

Starr,R.,et.al., Nature 387 (6636), 917-921 (1997) Minamoto,S., et.al., Biochem. Biophys. Res. Commun. 237 (1), 79-83 (1997)

SOCS1 Antibody (N-term) - Citations

• <u>Sea Cucumber Peptide Alleviates Ulcerative Colitis Induced by Dextran Sulfate Sodium by</u> <u>Alleviating Gut Microbiota Imbalance and Regulating miR-155/SOCS1 Axis in Mice</u>

