

SOCS1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8790A

Product Information

Application WB, IHC-P, IF, FC, E

Primary Accession <u>015524</u>

Reactivity Human, Rat, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGCalculated MW23551Antigen Region35-66

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~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~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.

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:32499645, PubMed:33087723). 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:9341160). 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:11278610, PubMed:11313480).

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

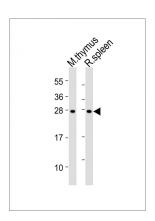
Background

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.

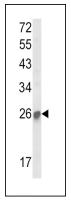
References

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

Images

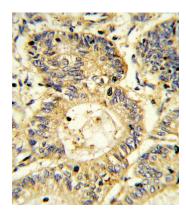


All lanes: Anti-SOCS1 Antibody (N-term) at 1:2000 dilution Lane 1: mouse thymus lysates Lane 2: rat spleen lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

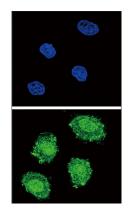


Western blot analysis of SOCS1 Antibody (N-term) (Cat. #AP8790a) in mouse kidney tissue lysates (35ug/lane). SOCS1 (arrow) was detected using the purified Pab.

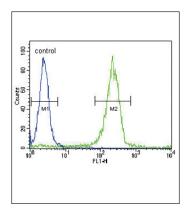
Formalin-fixed and paraffin-embedded human colon carcinoma reacted with SOCS1 Antibody (N-term), which



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.



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



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.