

## SOCS1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8790A

## **Specification**

## SOCS1 Antibody (N-term) - Product Information

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

Primary Accession
Reactivity
Mouse, Rat
Host
Clonality
Isotype
Antigen Region

O15524
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**

IF~~1:10~50 WB~~1:2000 IHC-P~~1:10~50 FC~~1:10~50

#### 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: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**

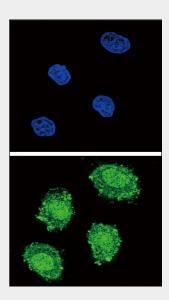
Expressed in all tissues with high expression in spleen, small intestine and peripheral blood leukocytes

### SOCS1 Antibody (N-term) - Protocols

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

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

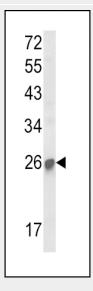
# SOCS1 Antibody (N-term) - Images



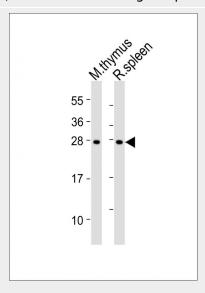
Confocal immunofluorescent analysis of SOCS1 Antibody (N-term) (Cat. #AP8790a) with 293 cell followed by Alexa Fluor ?488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the



cell nuclear (blue).

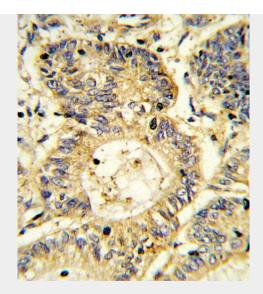


Western blot analysis of SOCS1 Antibody (N-term) (Cat. #AP8790a) in mouse kidney tissue lysates (35ug/lane). SOCS1 (arrow) was detected using the purified Pab.

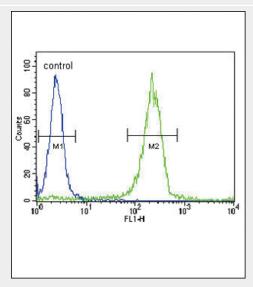


All lanes : Anti-SOCS1 Antibody (N-term) at 1:2000 dilution Lane 1: mouse thymus lysates Lane 2: rat spleen lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





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

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



