

SOCS1 Antibody (N-Terminus) Rabbit Polyclonal Antibody Catalog # ALS12399

### **Specification**

# SOCS1 Antibody (N-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E <u>O15524</u> Human Rabbit Polyclonal 24kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A

# SOCS1 Antibody (N-Terminus) - 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** 17 amino acid peptide from near the amino terminus of human SOCS1

**Reconstitution & Storage** Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

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

#### SOCS1 Antibody (N-Terminus) - 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:<a href="http://www.uniprot.org/citations/32499645" target="\_blank">32499645</a>, PubMed:<a href="http://www.uniprot.org/citations/33087723" target="\_blank">33087723</a>). 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:<a href="http://www.uniprot.org/citations/3087723" target="\_blank">activity. In vitro, suppresses Tec



target="\_blank">9341160</a>). 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:<a

href="http://www.uniprot.org/citations/11278610" target="\_blank">11278610</a>, PubMed:<a href="http://www.uniprot.org/citations/11313480" target="\_blank">11313480</a>).

# **Cellular Location** Nucleus. Cytoplasmic vesicle. Note=Detected in perinuclear cytoplasmic vesicles upon interaction with FGFR3

#### **Tissue Location**

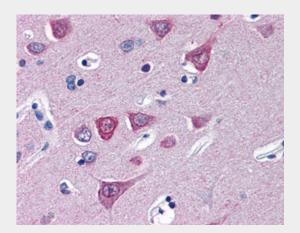
Expressed in all tissues with high expression in spleen, small intestine and peripheral blood leukocytes

# SOCS1 Antibody (N-Terminus) - Protocols

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

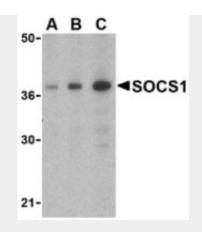
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# SOCS1 Antibody (N-Terminus) - Images



Anti-SOCS1 antibody IHC of human brain, cortex.





Western blot of SOCS1 in Human spleen cell lysate with SOCS1 antibody at (A) 1, (B) 2 and (C) 4...

# SOCS1 Antibody (N-Terminus) - Background

SOCS family proteins form part of a classical negative feedback system that regulates cytokine signal transduction. SOCS1 is involved in negative regulation of cytokines that signal through the JAK/STAT3 pathway. Through binding to JAKs, inhibits their kinase activity. In vitro, also suppresses Tec protein- tyrosine activity. Appears to be a major regulator of signaling by interleukin 6 (IL6) and leukemia inhibitory factor (LIF). Regulates interferon-gamma 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. Seems to recognize JAK2. SOCS1 appears to be a negative regulator in IGF1R signaling pathway.

# SOCS1 Antibody (N-Terminus) - References

Minamoto S., et al. Biochem. Biophys. Res. Commun. 237:79-83(1997). Ohya K., et al.J. Biol. Chem. 272:27178-27182(1997). Starr R., et al. Nature 387:917-921(1997). Yandava C.N., et al. Genomics 61:108-111(1999). Schlueter G., et al. Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.