

Anti-SOCS1 Antibody
Catalog # ABO10557

Specification

Anti-SOCS1 Antibody - Product Information

Application	WB, IHC
Primary Accession	O15524
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Suppressor of cytokine signaling 1(SOCS1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SOCS1 Antibody - 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

Calculated MW

23551 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

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

Tissue Specificity

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

Protein Name

Suppressor of cytokine signaling 1(SOCS-1)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human SOCS1(197-211aa

NPVLRDYLSSFPFQI), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Contains 1 SH2 domain.

Anti-SOCS1 Antibody - 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

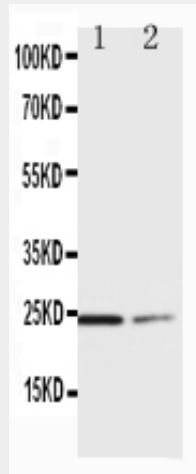
Anti-SOCS1 Antibody - Protocols

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

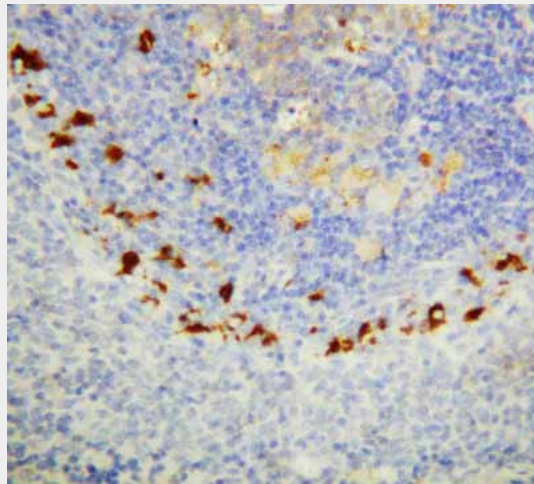
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SOCS1 Antibody - Images



Anti-SOCS1 antibody, ABO10557, Western blotting Lane 1: HT1080 Cell Lysate Lane 2: COLO320 Cell Lysate



Anti-SOCS1 antibody, ABO10557, IHC(P)IHC(P): Rat Spleen Tissue

Anti-SOCS1 Antibody - Background

Suppressor of cytokine signaling 1 (SOCS1), also known as Jak-binding protein (JAB), is a negative regulator to a subset of protein-tyrosine kinases. This 211-amino acid protein has a molecular mass of about 23.5 kD. The TEC-binding region of SOCS1 resides in the N terminus. SOCS1 associates with Tec and suppresses its kinase activity. The SOCS1 gene is intronless and is mapped to on chromosome 16p13.13. SOCS1 regulates the JAK/STAT signal-transduction pathway. Moreover, it contributes to protection against hepatic injury and fibrosis, and may also protect against hepatocarcinogenesis.