

SOCS-1 Polyclonal Antibody

Catalog # AP72545

Specification

SOCS-1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF <u>015524</u> Human, Mouse, Rat Rabbit Polyclonal

SOCS-1 Polyclonal Antibody - Additional Information

Gene ID 8651

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

Dilution WB~~IF: 1:50-200 WB 1:500-2000, ELISA 1:10000-20000 IHC 1:50-300 IHC-P~~N/A IF~~IF: 1:50-200 WB 1:500-2000, ELISA 1:10000-20000 IHC 1:50-300

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

SOCS-1 Polyclonal 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:<a



href="http://www.uniprot.org/citations/11278610" target="_blank">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

SOCS-1 Polyclonal Antibody - 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>

SOCS-1 Polyclonal Antibody - Images



























SOCS-1 Polyclonal Antibody - 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.