

Goat Anti-SOCS1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF2019a**Specification**

Goat Anti-SOCS1 Antibody - Product Information

Application	WB, IHC, E
Primary Accession	O15524
Other Accession	NP_003736 , 8651 , 12703 (mouse)
Reactivity	Human, Mouse
Predicted	Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	23551

Goat 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

Dilution

WB~~1:1000
IHC~~1:100~500
E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-SOCS1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat 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

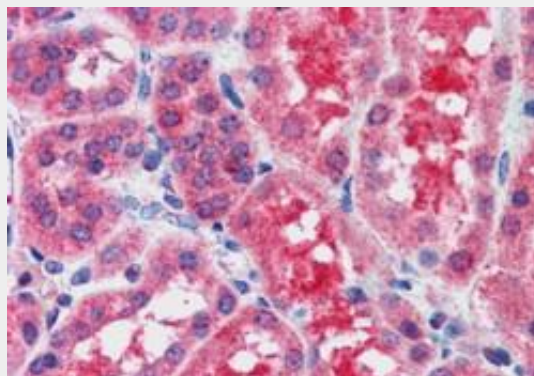
Tissue Location

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

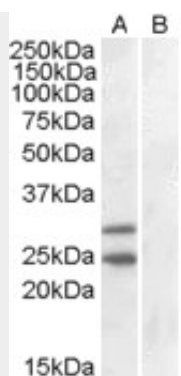
Goat Anti-SOCS1 Antibody - Protocols

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](#)

Goat Anti-SOCS1 Antibody - Images

AF2019a (2.5 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



HEK293 overexpressing SOCS1 and probed with AF2019a (mock transfection in lane B).



AF2019a staining (2 µg/ml) of mouse spleen lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-SOCS1 Antibody - Background

This gene encodes 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. The expression of this gene can be induced by a subset of cytokines, including IL2, IL3 erythropoietin (EPO), CSF2/GM-CSF, and interferon (IFN)-gamma. The protein encoded by this gene functions downstream of cytokine receptors, and takes part in a negative feedback loop to attenuate cytokine signaling. Knockout studies in mice suggested the role of this gene as a modulator of IFN-gamma action, which is required for normal postnatal growth and survival.

Goat Anti-SOCS1 Antibody - References

Meta-analyses of genes modulating intracellular T3 bio-availability reveal a possible role for the DIO3 gene in osteoarthritis susceptibility. Meulenbelt I, et al. Ann Rheum Dis, 2010 Aug 19. PMID 20724312.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Dengue hemorrhagic fever is associated with polymorphisms in JAK1. Silva LK, et al. Eur J Hum Genet, 2010 Jun 30. PMID 20588308.

Increased expression of suppressor of cytokine signaling 1 mRNA in patients with rheumatoid arthritis. Chan HC, et al. Kaohsiung J Med Sci, 2010 Jun. PMID 20538233.

Polymorphisms in innate immunity genes and risk of childhood leukemia. Han S, et al. Hum Immunol, 2010 Jul. PMID 20438785.