

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

Specification

Goat Anti-SOCS1 Antibody - Product Information

Application	IHC, WB
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

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

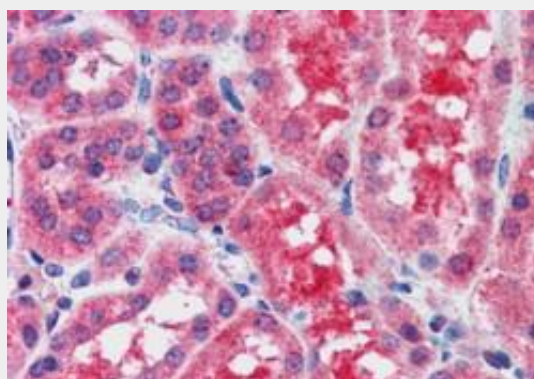
Expressed in all tissues with high expression in spleen, small intestine and peripheral blood leukocytes

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.