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SOCS1 Recombinant Rabbit mAb

Catalog # AP100292

Product Information

Application	WB, IHC-P, IHC-F, IF, IP, E
Primary Accession	O15524
Other Accession	O15524
Reactivity	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	23551
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 SH2 domain. Contains 1 SOCS box domain.
SUBUNIT	Interacts with multiple activated signaling proteins of the tyrosine kinase signaling pathway including JAK family kinases, TEC, KIT, GRB2 and VAV. Binding to JAKs is mediated through the KIR and SH2 domains to a phosphorylated tyrosine residue within the JAK JH1 domain. Binds the SH3 domain of GRB2 via diproline determinants in the N-terminus, and the N-terminal regulatory domain of VAV. Interacts with the Elongin BC complex (TCEB1 and TCEB2). Component of an ECS CBC(SOCS1) E3 ubiquitin-protein ligase complex which contains Elongin BC, CUL5, RBX1 and SOCS1. Interacts (via SH2 domain and SOCS box) with TRIM8. Interacts with AXL, CUL2 and FGFR3. Interacts with INSR.
Background Descriptions	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. [provided by RefSeq, Jul 2008],

Additional Information

Gene ID	8651
Other Names	AISIMD; CIS1; CISH1; JAB; SOCS-1; SSI-1; SSI1; TIP-3; TIP3; Cish7; SOCS1_HUMAN; SOCS1; JAK-binding protein (JAB); STAT-induced STAT inhibitor 1 (SSI-1); Tec-interacting protein 3 (TIP-3); SOCS1_MOUSE; SOCS1_RAT; suppressor of cytokine signaling 1; JAK-binding protein; STAT-induced STAT inhibitor 1; Tec-interacting protein 3
Dilution	IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10

	000,IP=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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). Down-regulates 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

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