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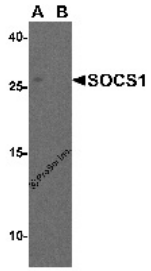
SOCS1 Antibody

CATALOG NUMBER: 3765



Western blot analysis of SOCS1 in human spleen tissue lysate with SOCS1 antibody at 1 ug/ml in (A) the absence and (B) the presence of blocking peptide.

Specifications

SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	ELISA, WB
APPLICATIONS:	SOCS1 antibody can be used for the detection of SOCS1 by Western blot at 1 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1306 - Human Spleen Tissue Lysate
PREDICTED MOLECULAR WEIGHT:	Predicted: 23 kDa Observed: 16 kDa
IMMUNOGEN:	SOCS1 antibody was raised against a 15 amino acid synthetic peptide from near the carboxy terminus of human SOCS1. The immunogen is located within the last 50 amino acids of SOCS1.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	SOCS1 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	SOCS1 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	SOCS1 antibody can be stored at 4˚C for three months and -20˚C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	SOCS1 Antibody: JAB, CIS1, SSI1, TIP3, CISH1, SSI-1, SOCS-1, Suppressor of cytokine signaling 1, JAK-binding protein
ACCESSION NO.:	CAB92528
PROTEIN GI NO.:	8217331
OFFICIAL SYMBOL:	SOCS1
GENE ID:	8651

Background

BACKGROUND:	SOCS1 Antibody: The Suppressor of cytokine signaling (SOCS) and cytokine-inducible SH2 proteins are a family of intracellular proteins which regulate the immune cell responses to cytokines. SOCS1 acts to suppress dendritic cell (DC) as well as T cell hyperactivation following cytokine signaling by inhibiting JAK tyrosine kinase, a kinase necessary for type I and II cytokine receptors to initiate signaling, by directly binding to the catalytic domain of the kinase. SOCS1 also possesses E3 ubiquitin protein ligase activity that results in the polyubiquitination of its target proteins and subsequent degradation by the proteosome. It is through this method that SOCS1 negatively regulates signaling by Toll-like receptors TLR2 and TLR4 by mediating the degradation of the TLR signaling adaptor protein TIRAP.
REFERENCES:	1) Rakesh K and Agrawal DK. Controlling cytokine signaling by constitutive inhibitors. Biochem. Pharm. 2005; 70:649-57.
	2) O'Shea JJ, Gadina M, and Schreiber RD. Cytokine signaling in 2002: new surprises in the Jak/Stat pathway. Cell 2002; 109:S121-31.
	3) Kile BT, Schulman BA, Alexander WS, et al. The SOCS box: a tale of destruction and degradation. Trends Biochem. Sci. 2002; 27:235-41.
	4) Mansell A, Smith R, Doyle SL, et al. Suppressor of cytokine signaling 1 negatively mediates Toll-like receptor signaling by mediating Mal degradation. Nat. Immunol. 2006; 7:148-55.

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December 12, 2016