

**SOCS1 (A156) Antibody**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	23	Rabbit	#O15524	8651

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

SOCS1 (A156) Antibody detects endogenous levels of total SOCS1 protein.

**Species predicted to react based on 100% sequence homology**

Dog

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala156 of human SOCS1. Antibodies were purified by protein A and peptide affinity chromatography.

**Background**

The suppressor of cytokine signaling (SOCS) family members are negative regulators of cytokine signal transduction that inhibit the Jak/Stat pathway (1-3). The SOCS family consists of at least 8 members including the originally identified cytokine-inducible SH2-containing protein (CIS1), as well as SOCS1-7. Each SOCS family member contains a central SH2 domain and a conserved carboxy-terminal motif designated as the SOCS box. These proteins are important regulators of cytokine signaling, proliferation, differentiation, and immune responses.

SOCS1 (suppressor of cytokine signaling 1), also known as JAB (Janus Kinase binding protein), SSI-1 (Stat-induced Stat inhibitor-1), and TIP3 (Tec-interacting protein 3) (4-7), is a cytokine-regulated SOCS family member that directly inhibits Jak family members through interaction within their kinase activation loop. In addition to inhibiting Jak/Stat signaling, SOCS1 can also negatively regulate Toll-like receptors that contribute to innate immunity (8,9). The SOCS box of SOCS1 can trigger ubiquitin-mediated degradation of proteins within and outside of the Jak/Stat pathway (10,11). The highest expression of SOCS1 is seen in the thymus and spleen and it plays a critical role in T-cell activation and lymphocyte differentiation (4,12). SOCS1 also functions as a tumor suppressor protein by inhibiting hematopoietic oncogenes (13,14).

**Background References**

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- Rottapel, R. et al. (2002) *Oncogene* 21, 4351-62.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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