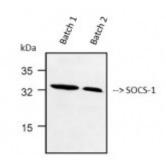


## **Anti-SOCS-1** antibody



Western Blot (WB) analysis of KB cell lysate using SOCS-1 antibody (STJ95727) from 2 batches.



**Description** SOCS-1 is a protein encoded by the SOCS1 gene which is approximately

23,5 kDa. SOCS-1 is localised to the nucleus and cytoplasm. It is involved in activated TLR4 signalling, the prolactin signalling pathway, IL-2 pathway and class I MHC mediated antigen processing and presentation. This protein is a member of the suppressor of cytokine signalling family. It forms part of a negative feedback system that regulates cytokines that signal through the JAK/STAT3 pathway. SOCS-1 is expressed in all tissues with high expression in spleen, small intestine and peripheral blood leukocytes. Mutations in the SOCS1 gene may result in ileum cancer and infectious anterior uveitis. STJ95727 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of SOCS-1 protein.

Model STJ95727

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, FC, WB

**Immunogen** Synthesized peptide derived from human SOCS-1.

Immunogen Region Internal

**Gene ID** 8651

Gene Symbol SOCS1

**Dilution range** WB 1:500-1:2000ICC 1:200-1:1000ELISA 1:40000

**Specificity** SOCS-1 Polyclonal Antibody detects endogenous levels of SOCS-1 protein.

**Tissue Specificity** Expressed in all tissues with high expression in spleen, small intestine and

peripheral blood leukocytes.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

**Protein Name** Suppressor of cytokine signaling 1 SOCS-1 JAK-binding protein JAB STAT-

induced STAT inhibitor 1 SSI-1 Tec-interacting protein 3 TIP-3

Molecular Weight 36 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:19383OMIM:603597

Alternative 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

**Function** SOCS family proteins form part of a classical negative feedback system that

regulates cytokine signal transduction. SOCS1 is involved in negative regulation of cytokines that signal through the JAK/STAT3 pathway. Through binding to JAKs, inhibits their kinase activity. In vitro, also suppresses Tec protein-tyrosine activity. Appears to be a major regulator of signaling by interleukin 6 (IL6) and leukemia inhibitory factor (LIF). Regulates interferongamma mediated sensory neuron survival . 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. Seems to recognize JAK2. SOCS1 appears to

be a negative regulator in IGF1R signaling pathway.

**Sequence and Domain Family** The ESS and SH2 domains are required for JAK phosphotyrosine binding.

Further interaction with the KIR domain is necessary for signal and kinase inhibition.; The SOCS box domain mediates the interaction with the Elongin BC complex, an adapter module in different E3 ubiquitin ligase complexes. The Elongin BC complex binding domain is also known as BC-box with the consensus [APST]-L-x(3)-C-x(3)-[AILV] and is part of the SOCS box .

Cellular Localization Nucleus Cytoplasmic vesicle. Detected in perinuclear cytoplasmic vesicles

upon interaction with FGFR3.