

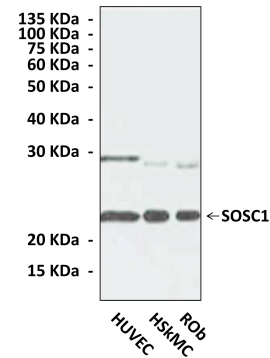
BACKGROUND

SOCS1 (Suppressor of cytokine signaling 1) is a member of the STAT-induced STAT inhibitor (SSI), also known as suppressor of cytokine signaling (SOCS), family. These family members are characterized by the presence of a src homology (SH2) domain and a carboxyl-terminal conserved domain called the SOCS box. So far, 8 members of the SOCS family have been identified, termed SOCS-1 to SOCS-7 and CIS (cytokine-inducible SH2-containing protein).¹ SOCS1 inhibits JAK-mediated cytokine signaling by binding to JAKs. It has been shown to be an important physiological negative regulator of various cytokines including IFN γ and IL-4. SOCS1 also modulates toll-like receptor (TLR) signaling in macrophages. SOCS1-deficient mice (SOCS1 $^{-/-}$) die neonatally because of multiorgan inflammation.² Recently, it was demonstrated that SOCS1 also participated in downstream signaling of receptor tyrosine kinase such as c-Kit and insulin receptor.³ In addition, SOCS1 has also been suggested to function as an antioncogene. Mutations and deletions of the SOCS1 gene have been found in several lymphomas.⁴

References:

1. Yasukawa H et al.: Ann. Rev. Immunol. 18:143-164, 2000.
2. Starr R et al.: Proc. Natl. Acad. Sci USA 95:14395-14399, 1998.
3. De Sepulveda P et al.: EMBO J. 18:904-915, 1999.
4. Calabrese V et al.: Mol. Cell 36:754-767, 2009.

QUALITY CONTROL DATA



Western Blot detection of endogenous SOCS1 protein from various normal primary cells using SOCS1 Antibody. HUVEC: Human Umbilical Vein Endothelial Cells; HSkMC: Human Skeletal Muscle Cells; ROB: Rat Osteoblasts; HL60 cell line.

TECHNICAL INFORMATION

Source:

SOCS1 Antibody is a rabbit polyclonal antibody raised against human SOCS1 carboxyl-terminal sequence.

Specificity and Sensitivity:

This polyclonal antibody detects endogenous levels of SOCS1 proteins in normal primary cell lysates.

Storage Buffer: PBS and 30% glycerol

Storage:

Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	1:50
IHC	1:100
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

