



Product Information Sheet

Polyclonal Anti-Suppressor of cytokine signaling 1, **SOCS1**

Catalogue No. PA1074

Lot No. 03A02

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

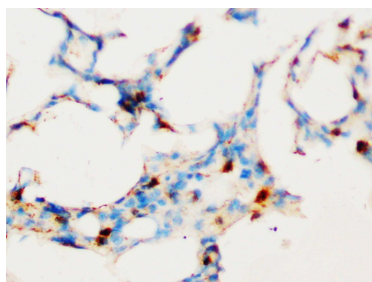
Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human SOCS1, identical to the related mouse and rat sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1µg/ml with the appropriate system to detect SOCS1 in cells and tissues.

Immunohistochemistry(P)

At 1µg/ml to detect SOCS1 in formalin fixed and paraffin embedded tissues.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at:

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BACKGROUND

Suppressor of cytokine signaling 1 (SOCS1), also known as Jak-binding protein (JAB), is a negative regulator to a subset of protein-tyrosine kinases. This 211-amino acid protein has a molecular mass of about 23.5 kD. The TEC-binding region of SOCS1 resides in the N terminus. SOCS1 associates with Tec and suppresses its kinase activity.¹ The SOCS1 gene is intronless and is mapped to on chromosome 16p13.13.² SOCS1 regulates the JAK/STAT signal-transduction pathway.³ Moreover, it

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contributes to protection against hepatic injury and fibrosis, and may also protect against hepatocarcinogenesis.⁴

REFERENCE

1. Ohya K, Kajigaya S, Yamashita Y, Miyazato A, Hatake K, Miura Y, Ikeda U, Shimada K, Ozawa K, Mano H. SOCS-1/JAB/SSI-1 can bind to and suppress Tec protein-tyrosine kinase. *J Biol Chem*. 1997 Oct 24; 272(43):27178-82.
2. Kramer JA, Adams MD, Singh GB, Doggett NA, Krawetz SA. A matrix associated region localizes the human SOCS-1 gene to chromosome 16p13.13. *Somat Cell Mol Genet*. 1998 Mar; 24(2):131-3.
3. Nagai H, Naka T, Terada Y, Komazaki T, Yabe A, Jin E, Kawanami O, Kishimoto T, Konishi N, Nakamura M, Kobayashi Y, Emi M. Hypermethylation associated with inactivation of the SOCS-1 gene, a JAK/STAT inhibitor, in human hepatoblastomas. *J Hum Genet*. 2003; 48(2):65-9.
4. Yoshida T, Ogata H, Kamio M, Joo A, Shiraishi H, Tokunaga Y, Sata M, Nagai H, Yoshimura A. SOCS1 is a suppressor of liver fibrosis and hepatitis-induced carcinogenesis. *J Exp Med*. 2004 Jun 21; 199(12):1701-7.