ZYMED® Laboratories
invitrogen immunodetection

Qty: 100 µg/400 µl

Rabbit anti-SOCS-1

Catalog No. 38-5200

Lot No. See product label

Rabbit anti-SOCS-1

FORM
This polyclonal antibody is supplied as a 400 µl aliquot at a concentration of 0.25 mg/ml in phosphate buffered saline (PBS), pH 7.4, containing 0.1% sodium azide (NaN_3). The antibody is epitope-affinity purified from rabbit antiserum.

POLYCLONAL ANTIBODY DESIGNATION (PAD): ZMD.385

ISOTYPE: Rabbit Ig

IMMUNOGEN
A synthetic peptide derived from the C-terminal region of human, mouse or rat SOCS-1 protein.

SPECIFICITY
This antibody reacts specifically with the ~ 30 kDa SOCS-1 protein.

REACTIVITY
Reactivity was confirmed by Western blotting using mouse thymus cell lysates and HepG2 human hepatocellular carcinoma lysate. Based on amino sequence homology, this antibody is also expected to react with rat SOCS-1 protein.

Sample	Immuno-precipitation	Western blotting
Mouse	0*	++
Human	ND	++

(Excellent +++, Good++, Poor +, No reactivity 0, Not Determined ND)
* No reactivity observed under condition tested.

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1-3 µg/ml

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

BACKGROUND

SOCS-1, also called Janus kinase (JAK) binding protein (JAB), or STAT-induced STAT inhibitor (SSI-1), is an SH2-domain-containing protein. It was shown to interact with all four Jak kinases (Jak1, Jak2, Jak3 and Tyk2) and is induced by and inhibits the signaling action of IL-3, IL-4, IL-6, growth hormone, LIF, prolactin, interferon gamma (IFN-γ), and erythropoietin [1]. It plays an important role in the negative regulation of IFN- γ signaling and in the differentiation of T-cells [2]. SOCS-1 mRNA is highly expressed in the thymus, to a much lower level in spleen, and not expressed in most other tissues [3]. Biochemical characterization as well as gene disruption studies indicate that SOCS-1 is an important negative regulator of the JAK-STAT signal pathway.

REFERENCES

1. Sporri B, et al. *Blood* 97:221-226, 2001.
2. Krebs D.L., & Hilton, D.J.; *J. Cell Sci.* 113:2813-2819, 2000.
3. Marine J-C, et al. *Cell* 98:609-616, 1999.

RELATED PRODUCTS

Product	*Conjugate*	*Cat. No.*
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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