

Datasheet: VMA00027

Description:	MOUSE ANTI SOCS-3
Specificity:	SOCS-3
Other names:	Supressor of Cytokine Signaling 3
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Isotype:	IgG2b
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Mouse monoclonal antibody purified by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative

0.09% Sodium Azide (NaN₃)

Stabilisers

Immunogen Full length SOCS-3 protein

External Database Links

UniProt:

[O14543](#) [Related reagents](#)

Entrez Gene:

[9021](#) SOCS3 [Related reagents](#)

Synonyms CIS3, SSI3

Specificity

Mouse anti Human SOCS-3 antibody recognizes the human suppressor of cytokine signaling 3 protein, also known as SOCS-3, cytokine-inducible SH2 protein 3 or STAT-induced STAT inhibitor 3. SOCS-3 is a 225 amino acid member of the suppressor of cytokine signaling family ([Starr et al. 1997](#)) containing a single [SH2](#) and a single [SOCS](#) box domain. SOCS-3 acts as a negative regulator of janus kinase (JAK) and signal transducer and activators of transcription (STAT) signaling pathways.

SOCS-3 specifically acts as a negative feedback regulator for the STAT3 pathways, by directly binding to the Tyr-759 motif of the IL-6 signal-transducing receptor subunit gp130, thereby preventing the IL-6 activation of STAT3.

The expression of SOCS-3 is inducible by numerous factors, including IL-6, IL-10, toll-like receptor (TLR) agonists and interferon (IFN) gamma, making this protein the focus of research into inflammatory diseases such as arthritis, colitis and Crohn's disease ([Elliott and Johnstone 2004](#)). SOCS-3 expression has also been shown to affect IFN alpha sensitivity in tumor studies ([Brender et al. 2001](#)).

Notch signaling plays a critical role in the determination of M1 versus M2 macrophage polarization. RBPJ-mediated notch signaling regulates this polarization through SOCS-3 ([Narayana and Balaji 2008](#), [Schroeder and Just 2000](#)).

Mouse anti Human SOCS-3 antibody recognizes human SOCS-3 as a single band of ~25 kDa in MCF7 cell lysates by western blotting under reducing conditions. This antibody also cross reacts with SOCS-3 from murine cell lines.

Western Blotting Anti SOCS-3 antibody detects a band of approximately 25 kDa in MCF7 cell lysates.

Storage Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Guarantee 12 months from date of despatch

Acknowledgements PrecisionAb is a trademark of Bio-Rad Laboratories.

Health And Safety Information Material Safety Datasheet documentation #10040 available at: Antibody (10040): <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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