

Datasheet: VMA00027KT

Description:	SOCS-3 ANTIBODY WITH CONTROL LYSATE
Specificity:	SOCS-3
Other names:	Suppressor of Cytokine Signaling 3
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Isotype:	IgG2b
Quantity:	2 Westerns

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

PrecisionAb antibodies have been extensively [validated for the western blot application](#). The antibody has been validated at the suggested dilution. 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 dependant 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

20µl 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.

Instructions For Use Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

Lysate Composition 400µg MCF7 lysate lyophilized in RIPA buffer.

Lysate Reconstitution - If using DDT reconstitute the lyophilized lysate with 190µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.
- If using BME reconstitute the lyophilized lysate with 180µl DI H₂O, add 200µl 2x Laemmli

Sample Buffer and 20µl BME.

Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

Storage	Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles. Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.
Guarantee	As supplied, 12 months from date of despatch.
Acknowledgements	PrecisionAb™ is a trademark of Bio-Rad Laboratories.
Health And Safety Information	Material Safety Datasheet documentation #10040 #10561 available at: Antibody (10040): https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf
Regulatory	For research purposes only

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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