

## Datasheet: VMA00027

|                      |                                    |
|----------------------|------------------------------------|
| <b>Description:</b>  | MOUSE ANTI SOCS-3                  |
| <b>Specificity:</b>  | SOCS-3                             |
| <b>Other names:</b>  | Suppressor of Cytokine Signaling 3 |
| <b>Format:</b>       | Purified                           |
| <b>Product Type:</b> | PrecisionAb Monoclonal             |
| <b>Clone:</b>        | SO1                                |
| <b>Isotype:</b>      | IgG2b                              |
| <b>Quantity:</b>     | 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](http://www.bio-rad-antibodies.com/protocols).

|                            | Yes | No | Not Determined | Suggested Dilution |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry             |     |    | ▪              |                    |
| Immunohistology - Frozen   |     |    | ▪              |                    |
| Immunohistology - Paraffin |     |    | ▪              |                    |
| ELISA                      | ▪   |    |                |                    |
| Immunoprecipitation        |     |    | ▪              |                    |
| 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.

|                                 |   |
|---------------------------------|---|
| <b>Target Species</b>           | Human   |
| <b>Species Cross Reactivity</b> | <p>Reacts with: Mouse</p> <p><b>N.B.</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.</p> |
| <b>Product Form</b>             | Purified IgG - liquid   |

|                                 |  |
|---------------------------------|--|
| <b>Preparation</b>              | Mouse monoclonal antibody purified by affinity chromatography on Protein A from tissue culture supernatant   |
| <b>Buffer Solution</b>          | Phosphate buffered saline.   |
| <b>Preservative Stabilisers</b> | 0.09% Sodium Azide (NaN <sub>3</sub> ).  |
| <b>Immunogen</b>                | Full length SOCS-3 protein   |
| <b>External Database Links</b>  | <p><b>UniProt:</b><br/> <a href="#">O14543</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">9021</a>    SOCS3    <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                 | CIS3, SSI3   |
| <b>Specificity</b>              | <p><b>Mouse anti Human SOCS-3 antibody, clone SO1</b> 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 (<a href="#">Starr <i>et al.</i> 1997</a>) containing a single <a href="#">SH2</a> and a single <a href="#">SOCS</a> box domain. SOCS-3 acts as a negative regulator of janus kinase (JAK) and signal transducer and activators of transcription (STAT) signaling pathways.</p> <p>SOCS-3 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.</p> <p>The expression of SOCS-3 is inducible by numerous factors, including IL-6, IL-10, toll-like receptor (TLR) agonists and interferon (IFN) gamma, indicating roles in inflammatory diseases such as arthritis, colitis and Crohn's disease (<a href="#">Elliott and Johnstone 2004</a>). SOCS-3 expression affects IFN alpha sensitivity in tumors (<a href="#">Brender <i>et al.</i> 2001</a>).</p> <p>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 (<a href="#">Narayana and Balaji 2008</a>, <a href="#">Schroeder and Just 2000</a>).</p> <p>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.</p> |
| <b>Western Blotting</b>         | Anti SOCS-3 antibody detects a band of approximately 25 kDa in MCF7 cell lysates.  |
| <b>References</b>               | 1. Zheng, Y. <i>et al.</i> (2019) Lidocaine Potentiates SOCS3 to Attenuate Inflammation in Microglia and Suppress Neuropathic Pain. <a href="#">Cell Mol Neurobiol. 39 (8): 1081-92.</a>   |
| <b>Storage</b>                  | Store undiluted at -20°C, avoiding repeated freeze thaw cycles.  |

|                                      |   |
|--------------------------------------|---|
| <b>Guarantee</b>                     | 12 months from date of despatch   |
| <b>Acknowledgements</b>              | PrecisionAb is a trademark of Bio-Rad Laboratories.   |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/VMA00027">https://www.bio-rad-antibodies.com/SDS/VMA00027</a><br>Antibody (10040) |
| <b>Regulatory</b>                    | 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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|----------------------------------|---|------------------|---|---------------|---|

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
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