



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Mouse Anti Human SOCS-3

With HRP-conjugated Secondary Antibody

Catalog No.
DS-MB-02308

Target Species
Human

Isotype
IgG2b

Preparation

Preparation: Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Immunogen: Full - length SOCS3 protein.

Specificity

DS-MB-02308 recognizes suppressor of cytokine signaling 3 (SOCS3), a 30kDa member of the suppressor of cytokine signaling family (SOCS) which negatively regulate Janus Kinase (JAK) and signal transducer and activators of transcription (STAT) signaling pathways.

SOCS3 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 SOCS3 is inducible by numerous factors, including IL-6, IL-10, Toll-like receptor (TLR) agonists and IFN gamma, making this protein the focus of research into inflammatory diseases, such as Arthritis, Colitis, and Crohn's Disease. SOCS3 expression has also been shown to affect IFN alpha sensitivity in tumour studies.

Formulation

Product Type: Monoclonal Antibody

Product Form: Purified IgG - liquid

Buffer Solution: Phosphate buffered saline pH7.4

Preservative & Stabilizers: 0.09% Sodium Azide

Approx. Protein Concentrations: IgG concentration 1.0mg/ml

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody.

Applications

Table Summary of antibody applications and working conditions

| Options / Functions | YES | NO | Not determined | Recommended Work dilution or concentration |
|-----------------------------|-----|----|----------------|--|
| ELISA | . | | | |
| Western Blotting | . | | | 1:100 – 1:500 |
| Immunohistology - frozen(*) | | | . | |
| Immunohistology - paraffin | | | . | |
| Immunohistology - resin | | | . | |
| Immunoprecipitation | | | . | |
| Flow Cytometry | | | . | |
| Immunofluorescence | | | . | |
| Gel Super Shift Assays | | | . | |

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

Secondary Antibody Applications

| Options / Functions | YES | NO | Not determined | Recommended Work dilution or concentration |
|-----------------------------------|-----|----|----------------|--|
| Immunoassay (ELISA, Western blot) | . | | | 1:5000-1:10000 |

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Recommended Reading

1. Lehmann, U. *et al.* (2003) SHP2 and SOCS3 contribute to Tyr-759-dependent attenuation of interleukin-6 signaling through gp130. *J Biol. Chem.* 278(1): 661-671.
2. Suzuki, A. *et al.* (2001) CIS3/SOCS3/SSI3 plays a negative regulatory role in STAT3 activation and intestinal inflammation. *J. Exp. Med.* 193(4): 471-481.
3. Lang, R. *et al.* (2003) SOCS3 regulates the plasticity of gp130 signaling. *Nature Immunology* 4(6): 546-550.
4. Sakai, I. *et al.* (2002) Constitutive expression of SOCS3 confers resistance to IFN-alpha in chronic myelogenous leukemia cells. *Blood* 100(8): 2926-2930.

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