

Datasheet: MCA4647F

Description:	RAT ANTI MOUSE SIGLEC-H:FITC
Specificity:	SIGLEC-H
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	440c
Isotype:	IgG2b
Quantity:	0.1 mg

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
Flow Cytometry	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide (NaN ₃)						
Stabilisers	1% Bovine Serum Albumin						
Approx. Protein Concentrations	IgG concentration 1.0mg/ml						
Immunogen	Purified bone marrow-derived IPCs and CpG oligodeoxynucleotide 1826.						

External Database Links	UniProt: Q3Y597 Related reagents
RRID	AB_10567706
Fusion Partners	Lymph node cells from immunised Wistar/CRL rats were fused with cells of the Sp2/0 myeloma cell line.
Specificity	<p>Rat anti Mouse Siglec-H antibody, clone 440c recognizes the cell surface receptor Siglec-H, a sialic acid binding Ig-like lectin and member of the immunoglobulin superfamily. Siglec-H is exclusively expressed by mouse natural interferon producing cells (IPCs), which play a major role in the first line defence against viruses, through the production of type I interferon (IFN), interleukin-12 (IL-12) and pro-inflammatory chemokines.</p> <p>Unlike other Siglecs, Siglec-H lacks a characteristic cytoplasmic ITIM (immunoreceptor tyrosine based inhibitory motif) domain, and instead relies upon its association with the adaptor protein DAP12 for signal transduction.</p> <p>Rat anti Mouse Siglec-H antibody, clone 440c inhibits IFN-alpha secretion by IPCs both <i>in vitro</i> and <i>in vivo</i> (Blasius et al. 2004).</p>
Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).</p>
References	<ol style="list-style-type: none"> Blasius, A. <i>et al.</i> (2004) A cell-surface molecule selectively expressed on murine natural interferon-producing cells that blocks secretion of interferon-alpha. Blood. 103 (11): 4201-6. Blasius, A.L. <i>et al.</i> (2006) Siglec-H is an IPC-specific receptor that modulates type I IFN secretion through DAP12. Blood. 107 (6): 2474-6. Akk, A. <i>et al.</i> (2016) Neutrophil Extracellular Traps Enhance Early Inflammatory Response in Sendai Virus-Induced Asthma Phenotype. Front Immunol. 7: 325. Liou, L.Y. <i>et al.</i> (2008) <i>In vivo</i> conversion of BM plasmacytoid DC into CD11b+ conventional DC during virus infection. Eur J Immunol. 38 (12): 3388-94.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	18 months from date of despatch.
Health And Safety	Material Safety Datasheet documentation #10041 available at:

Information 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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