

## Datasheet: MCA4647A647

<b>Description:</b>	RAT ANTI MOUSE SIGLEC-H:Alexa Fluor® 647
<b>Specificity:</b>	SIGLEC-H
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	440c
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	100 TESTS/1ml

## 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	▪			

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.

<b>Target Species</b>	Mouse		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®647	650	665
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05mg/ml		
<b>Immunogen</b>	Purified bone marrow-derived IPCs and CpG oligodeoxynucleotide 1826.		

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q3Y597</a> <a href="#">Related reagents</a>
<b>RRID</b>	AB_2189144
<b>Fusion Partners</b>	Lymph node cells from immunised Wistar/CRL rats were fused with cells of the Sp2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse Siglec-H antibody, clone 440c</b> 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> (<a href="#">Blasius et al. 2004</a>).</p>
<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label <math>1 \times 10^6</math> 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 (<a href="#">BUF041A/B</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>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. <a href="#">Blood. 103 (11): 4201-6.</a></li> <li>Blasius, A.L. <i>et al.</i> (2006) Siglec-H is an IPC-specific receptor that modulates type I IFN secretion through DAP12. <a href="#">Blood. 107 (6): 2474-6.</a></li> <li>Akk, A. <i>et al.</i> (2016) Neutrophil Extracellular Traps Enhance Early Inflammatory Response in Sendai Virus-Induced Asthma Phenotype. <a href="#">Front Immunol. 7: 325.</a></li> <li>Liou, L.Y. <i>et al.</i> (2008) <i>In vivo</i> conversion of BM plasmacytoid DC into CD11b+ conventional DC during virus infection. <a href="#">Eur J Immunol. 38 (12): 3388-94.</a></li> </ol>
<b>Storage</b>	<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. Avoid repeated freezing and thawing as this may denature the antibody. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	18 months from date of despatch.
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**Health And Safety Information**      Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory**                      For research purposes only

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### Recommended Useful Reagents

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

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

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**America**              Fax: +1 919 878 3751

                                 Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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'M361846:200319'

**Printed on 10 Feb 2021**

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