

## Datasheet: MCA2386A647T

<b>Description:</b>	RAT ANTI MOUSE CD223:Alexa Fluor® 647
<b>Specificity:</b>	CD223
<b>Other names:</b>	LAG-3
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	C9B7W
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 TESTS/0.25ml

### 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	▪			Neat - 1/10

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</b>	0.09% sodium azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% bovine serum albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		

<b>Immunogen</b>	Murine CD223 Ig fusion protein.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q61790</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16768</a>    Lag3    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2133342
<b>Fusion Partners</b>	Cells from immunized Lewis rats were fused with cells of the Sp/20 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD223 antibody, clone C9B7W</b> recognizes murine lymphocyte activation gene-3 (LAG-3), a ~70 kDa activation-induced cell surface molecule that is also referred to as CD223.</p> <p>Murine CD223 is expressed on activated CD4 positive and CD8 positive alpha/beta T lymphocytes and a subset of natural killer (NK) cells. CD223 binds to MHC class II molecules with high affinity and is reported to negatively regulate T cell homeostasis and T cell expansion.</p> <p>Clone C9B7W recognizes an epitope within the D2 domain of CD223.</p> <p>Rat anti Mouse CD223 antibody, clone C9B7W is reported to block the <i>in vitro</i> function of murine LAG-3 but does not block binding of LAG-3 to MHC class II (<a href="#">Workman et al. 2002</a>).</p>
<b>Flow Cytometry</b>	<p>Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl.</p> <p>The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (<a href="#">BUF041A/BUF041B</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Workman, C.J. <i>et al.</i> (2002) Cutting edge: molecular analysis of the negative regulatory function of lymphocyte activation gene-3. <a href="#">J Immunol. 169 (10): 5392-5.</a></li> <li>2. Workman, C.J. &amp; Vignali, D.A. (2005) Negative regulation of T cell homeostasis by lymphocyte activation gene-3 (CD223). <a href="#">J Immunol. 174 (2): 688-95.</a></li> <li>3. Byrne, K.T. <i>et al.</i> (2011) Autoimmune melanocyte destruction is required for robust CD8+ memory T cell responses to mouse melanoma. <a href="#">J Clin Invest. 121 (5): 1797-809.</a></li> <li>4. Ordway, D. <i>et al.</i> (2007) The hypervirulent <i>Mycobacterium tuberculosis</i> strain HN878 induces a potent TH1 response followed by rapid down-regulation. <a href="#">J Immunol. 179: 522-31.</a></li> <li>5. Hu, Z. <i>et al.</i> (2013) Regulatory CD8+ T cells associated with erosion of immune surveillance in persistent virus infection suppress <i>in vitro</i> and have a reversible proliferative defect. <a href="#">J Immunol. 191 (1): 312-22.</a></li> <li>6. Iwasaki, Y. <i>et al.</i> (2013) Egr-2 transcription factor is required for Blimp-1-mediated IL-10 production in IL-27-stimulated CD4+ T cells. <a href="#">Eur J Immunol. 43: 1063-73.</a></li> <li>7. Woo, S.R. <i>et al.</i> (2010) Differential subcellular localization of the regulatory T-cell protein LAG-3 and the coreceptor CD4. <a href="#">Eur J Immunol. 40: 1768-77.</a></li> </ol>

**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2386A647T>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Useful Reagents

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

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

**North & South** Tel: +1 800 265 7376

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

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

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

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

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

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

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