

## Datasheet: MCA2386A488T

<b>Description:</b>	RAT ANTI MOUSE CD223:Alexa Fluor® 488
<b>Specificity:</b>	CD223
<b>Other names:</b>	LAG-3
<b>Format:</b>	ALEXA FLUOR® 488
<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 - 1/5

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® 488 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®488	495	519
<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 0.05 mg/ml		

Immunogen	Murine CD223 Ig fusion protein.
External Database Links	<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>
RRID	AB_2133341
Fusion Partners	Cells from immunised Lewis rats were fused with cells of the Sp/20 myeloma cell line.
Specificity	<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. 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>
Flow Cytometry	<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>
References	<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.

<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a>
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2386A488T10041">https://www.bio-rad-antibodies.com/SDS/MCA2386A488T10041</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Useful Reagents

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

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M414820:221213'

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