

# Datasheet: MCA2386GA

**BATCH NUMBER 1611**

<b>Description:</b>	RAT ANTI MOUSE CD223
<b>Specificity:</b>	CD223
<b>Other names:</b>	LAG-3
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	C9B7W
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<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

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 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_566652
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	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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</li> </ol>

protein LAG-3 and the coreceptor CD4. [Eur J Immunol. 40: 1768-77.](#)

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**Storage**

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

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2386GA>  
10040

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

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'M366752:200529'

Printed on 18 Jan 2024

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