

Datasheet: MCA2386GA

#### **BATCH NUMBER 164680**

Description:	RAT ANTI MOUSE CD223
Specificity:	CD223
Other names:	LAG-3
Format:	Purified
<b>Product Type:</b>	Monoclonal Antibody
Product Type: Clone:	Monoclonal Antibody C9B7W
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# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

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

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 - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein C supernatant	G from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> )	

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Murine CD223 Ig fusion protein.
External Database Links	UniProt:  Q61790 Related reagents  Entrez Gene:  16768 Lag3 Related reagents
RRID	AB_566652
Fusion Partners	Cells from immunized Lewis rats were fused with cells of the Sp/20 myeloma cell line.
Specificity	Rat anti Mouse CD223 antibody, clone C9B7W recognizes murine lymphocyte activation gene-3 (LAG-3), a ~70 kDa activation-induced cell surface molecule that is also referred to as CD223.
	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.
	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 ( <u>Workman et al. 2002</u> ).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
References	<ol> <li>Workman, C.J. <i>et al.</i> (2002) Cutting edge: molecular analysis of the negative regulatory function of lymphocyte activation gene-3. <u>J Immunol. 169 (10): 5392-5.</u></li> <li>Workman, C.J. &amp; Vignali, D.A. (2005) Negative regulation of T cell homeostasis by lymphocyte activation gene-3 (CD223). <u>J Immunol. 174 (2): 688-95.</u></li> <li>Byrne, K.T. <i>et al.</i> (2011) Autoimmune melanocyte destruction is required for robust CD8+ memory T cell responses to mouse melanoma. <u>J Clin Invest. 121 (5): 1797-809.</u></li> <li>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. <u>J Immunol. 179: 522-31.</u></li> <li>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. <u>J Immunol. 191 (1): 312-22.</u></li> <li>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. <u>Eur J Immunol. 43: 1063-73.</u></li> </ol>

7. Woo, S.R. *et al.* (2010) Differential subcellular localization of the regulatory T-cell protein LAG-3 and the coreceptor CD4. Eur J Immunol. 40: 1768-77.

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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2386GA">https://www.bio-rad-antibodies.com/SDS/MCA2386GA</a> 10040
Regulatory	For research purposes only

#### **Related Products**

## **Recommended Secondary Antibodies**

Rabbit Anti Rat IgG (STAR16...) <u>DyLight®800</u>

Rabbit Anti Rat IgG (STAR17...)

Goat Anti Rat IgG (STAR72...)

Goat Anti Rat IgG (STAR69...)

Goat Anti Rat IgG (STAR73...)

RPE

Rabbit Anti Rat IgG (STAR21...)

HRP

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) <u>DyLight®550</u>, <u>DyLight®650</u>, <u>DyLight®800</u>

Goat Anti Rat IgG (STAR131...) Alk. Phos., Biotin

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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 'M414819:221213'

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