## Datasheet: MCA2386 BATCH NUMBER 1608

Description:	RAT ANTI MOUSE CD223
Specificity:	CD223
Other names:	LAG-3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	C9B7W
Isotype:	lgG1
Quantity:	0.25 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 <u>www.bio-rad-antibodies.com/protocols</u>.

		Yes	No	Not Determined	Suggested Dilution
	Flow Cytometry	-			1/50 - 1/200
	Immunohistology - Frozen			•	
	Immunohistology - Paraffin				
	ELISA				
	Immunoprecipitation				
	Western Blotting			•	
	Where this antibody has	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.				
Target Species	Mouse				
Product Form	Purified IgG - liquid				
Preparation	Purified IgG prepared by	affinity c	hromatog	raphy on Protein G fro	m tissue culture

	supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	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	UniProt: Q61790 Related reagents Entrez Gene: <u>16768</u> Lag3 <u>Related reagents</u>
RRID	AB_566651
Fusion Partners	Cells from immunised Lewis rats were fused with cells of the Sp/20 myeloma cell line.
Specificity	<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.
	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 <i>et al.</i> 2002</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul.
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. JImmunol. 169 (10): 5392-5.</li> <li>Workman, C.J. &amp; Vignali, D.A. (2005) Negative regulation of T cell homeostasis by lymphocyte activation gene-3 (CD223). JImmunol. 174 (2): 688-95.</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. J Clin Invest. 121 (5): 1797-809.</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. J Immunol. 179: 522-31.</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. J Immunol. 191 (1): 312-22.</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. Eur J Immunol. 43: 1063-73.</li> <li>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.
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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2386 10040
Regulatory	For research purposes only

## **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Rat IgG (STAR16)	DyLight®800			
Rabbit Anti Rat IgG (STAR17)	<u>FITC</u>			
Goat Anti Rat IgG (STAR72)	HRP			
Goat Anti Rat IgG (STAR69)	<u>FITC</u>			
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 'M366746:200529'

#### Printed on 18 Jan 2024

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