

Datasheet: MCA2386A647

Description:	RAT ANTI MOUSE CD223:Alexa Fluor® 647
Specificity:	CD223
Other names:	LAG-3
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	C9B7W
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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.

	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.

Target Species	Mouse		
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Immunogen	Murine CD223 Ig fusion protein.
External Database Links	<p>UniProt: Q61790 Related reagents</p> <p>Entrez Gene: 16768 Lag3 Related reagents</p>
RRID	AB_566650
Fusion Partners	Cells from immunized Lewis rats were fused with cells of the Sp/20 myeloma cell line.
Specificity	<p>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.</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 (Workman et al. 2002).</p>
Flow Cytometry	<p>Use 10µl of the suggested working dilution to label 10⁶ 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 (BUF041A/BUF041B).</p>
References	<ol style="list-style-type: none"> 1. Workman, C.J. <i>et al.</i> (2002) Cutting edge: molecular analysis of the negative regulatory function of lymphocyte activation gene-3. J Immunol. 169 (10): 5392-5. 2. Workman, C.J. & Vignali, D.A. (2005) Negative regulation of T cell homeostasis by lymphocyte activation gene-3 (CD223). J Immunol. 174 (2): 688-95. 3. 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. 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. J Immunol. 179: 522-31. 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. J Immunol. 191 (1): 312-22. 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. Eur J Immunol. 43: 1063-73. 7. Woo, S.R. <i>et al.</i> (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. This product is photosensitive and should be protected from light.

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/MCA2386A647>
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'M414823:221213'

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