

Datasheet: MCA2386A488

BATCH NUMBER 170835

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

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.

Target Species	Mouse						
Product Form	Purified IgG conjugated to Alexa Fluor® 488 - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®488</td> <td>495</td> <td>519</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®488	495	519					
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	IgG concentration 0.05 mg/ml						

Concentrations

Immunogen Murine CD223 Ig fusion protein.

External Database Links

UniProt:

[Q61790](#) [Related reagents](#)

Entrez Gene:

[16768](#) Lag3 [Related reagents](#)

RRID AB_566649

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 *in vitro* function of murine LAG-3 but does not block binding of LAG-3 to MHC class II ([Workman et al. 2002](#)).

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.

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](#)).

References

1. Workman, C.J. *et al.* (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. *et al.* (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. *et al.* (2007) The hypervirulent *Mycobacterium tuberculosis* strain HN878 induces a potent TH1 response followed by rapid down-regulation. [J Immunol. 179: 522-31.](#)
5. Hu, Z. *et al.* (2013) Regulatory CD8+ T cells associated with erosion of immune surveillance in persistent virus infection suppress *in vitro* and have a reversible proliferative defect. [J Immunol. 191 \(1\): 312-22.](#)
6. Iwasaki, Y. *et al.* (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. *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. 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/MCA2386A488>
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