

Datasheet: MCA2386A647

BATCH NUMBER 155051

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 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 conjugated to Alexa Fluor® 647 - 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®647</td> <td>650</td> <td>665</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®647	650	665
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						
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_566650

Fusion Partners Cells from immunised 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 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/B](#)).

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

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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

Acknowledgements This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2386A647>
10041

Regulatory For research purposes only

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M366749:200529'

Printed on 18 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)