

Datasheet: MCA2386A647T

**BATCH NUMBER 154577**

<b>Description:</b>	RAT ANTI MOUSE CD223:Alexa Fluor® 647
<b>Specificity:</b>	CD223
<b>Other names:</b>	LAG-3
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	C9B7W
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 TESTS/0.25ml

## 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](http://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.

<b>Target Species</b>	Mouse		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®647	650	665
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein</b>	IgG concentration 0.05 mg/ml		

## Concentrations

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**Immunogen** Murine CD223 Ig fusion protein.

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## External Database Links

**UniProt:**

[Q61790](#)   [Related reagents](#)

**Entrez Gene:**

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

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**RRID** AB\_2133342

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**Fusion Partners** Cells from immunised Lewis rats were fused with cells of the Sp/20 myeloma cell line.

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## 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](#)).

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## Flow Cytometry

Use 10ul of the suggested working dilution to label 10<sup>6</sup> 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](#)).

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## 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.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2386A647T>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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