



Datasheet: MCA1226A647

**BATCH NUMBER 173951**

<b>Description:</b>	MOUSE ANTI HUMAN CD8:Alexa Fluor® 647
<b>Specificity:</b>	CD8
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LT8
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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** Human

**Species Cross Reactivity** Reacts with: Marmoset, Chimpanzee, Cynomolgus monkey, Red-bellied Tamarin  
**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

**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 ion exchange chromatography from ascites

**Buffer Solution** Phosphate buffered saline

<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml
<b>Immunogen</b>	Normal human peripheral blood lymphocytes.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P01732</a>    <a href="#">Related reagents</a></p> <p><a href="#">P10966</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">925</a> CD8A    <a href="#">Related reagents</a></p> <p><a href="#">926</a> CD8B    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD8B1, MAL
<b>RRID</b>	AB_324876
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD8 antibody, clone LT8</b> recognizes the human CD8 cell surface glycoprotein expressed by a subset of peripheral blood T cells which express cytotoxic/suppressor activity. It is also expressed weakly on NK cells.</p> <p>The CD8 antigen is a co-receptor for MHC Class I in conjunction with the T cell receptor, and is important in the selection process of CD8+ MHC Class I restricted T cells.</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells or cells or 100µl human whole blood
<b>References</b>	<ol style="list-style-type: none"> <li>1. Zarkesh-Esfahani, H. <i>et al.</i> (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. <a href="#">J Immunol. 167 (8): 4593-9.</a></li> <li>2. Manninen, A. &amp; Saksela, K. (2002) HIV-1 Nef interacts with inositol trisphosphate receptor to activate calcium signaling in T cells. <a href="#">J Exp Med. 195 (8): 1023-32.</a></li> <li>3. Parnes, J.R. (1989) Molecular biology and function of CD4 and CD8. <a href="#">Adv Immunol. 44: 265-311.</a></li> <li>4. Kap, Y.S. <i>et al.</i> (2009) A monoclonal antibody selection for immunohistochemical examination of lymphoid tissues from non-human primates. <a href="#">J Histochem Cytochem. 57: 1159-67.</a></li> <li>5. Hovden, A.O. <i>et al.</i> (2011) Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. <a href="#">BMC Immunol. 12: 2.</a></li> <li>6. Nelson, M. <i>et al.</i> (2010) Characterization of lethal inhalational infection with <i>Francisella tularensis</i> in the common marmoset (<i>Callithrix jacchus</i>). <a href="#">J Med Microbiol. 59: 1107-13.</a></li> <li>7. Gibbings, D.J. <i>et al.</i> (2007) CD8 alpha is expressed by human monocytes and</li> </ol>

- enhances Fc gamma R-dependent responses. [BMC Immunol. 8: 12.](#)
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12. Manivannan, K. *et al.* (2016) CADM1/TSLC1 Identifies HTLV-1-Infected Cells and Determines Their Susceptibility to CTL-Mediated Lysis. [PLoS Pathog. 12 \(4\): e1005560.](#)
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14. Dunham, J. *et al.* (2016) Blockade of CD127 Exerts a Dichotomous Clinical Effect in Marmoset Experimental Autoimmune Encephalomyelitis. [J Neuroimmune Pharmacol. 11 \(1\): 73-83.](#)
15. Bughani, U. *et al.* (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. [PLoS One. 12 \(7\): e0180088.](#)
16. Philippens, I.H. *et al.* (2017) Acceleration of Amyloidosis by Inflammation in the Amyloid-Beta Marmoset Monkey Model of Alzheimer's Disease. [J Alzheimers Dis. 55 \(1\): 101-113.](#)
17. Flak, V.R. *et al.* (2024) Pembrolizumab followed by irreversible electroporation of a liver metastasis in pancreatic cancer patients [iScience. 27 \(10\): 111026.](#)

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**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.

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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/MCA1226A647>

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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
'M437009:250307'

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