

Datasheet: MCA1226PBT

### **BATCH NUMBER 1712**

Description:	MOUSE ANTI HUMAN CD8:Pacific Blue®
Specificity:	CD8
Format:	Pacific Blue®
Product Type:	Monoclonal Antibody
Clone:	LT8
Isotype:	lgG1
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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	Human
Species Cross	Reacts wit
Reactivity	NR Antih

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 Pacific Blue® - liquid			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	Pacific Blue®	410	455	
Preparation	Purified IgG prepared by ion exchange chromatography			
Buffer Solution	Phosphate buffered saline			

Preservative	0.09% Sodium Azide	
Stabilisers	1% Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml	
Immunogen	Normal human peripheral blood lymphocytes.	
External Database Links	UniProt:	
	P01732 Related reagents P10966 Related reagents	
	Entrez Gene:  925 CD8A Related reagents  926 CD8B Related reagents	
Synonyms	CD8B1, MAL	
RRID	AB_1102349	
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63.653 myeloma cell line.	
Specificity	Mouse anti Human CD8 antibody, clone LT8 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.	
	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.	
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or cells or 100ul human whole blood.	
References	<ol> <li>Zarkesh-Esfahani, H. et al. (2001) High-dose leptin activates human leukocytes via receptor expression on monocytes. <u>J Immunol. 167 (8): 4593-9.</u></li> <li>Manninen, A. &amp; Saksela, K. (2002) HIV-1 Nef interacts with inositol trisphosphate</li> </ol>	
	receptor to activate calcium signaling in T cells. <u>J Exp Med. 195 (8): 1023-32.</u> 3. Parnes, J.R. (1989) Molecular biology and function of CD4 and CD8. <u>Adv Immunol. 44: 265-311.</u> 4. Kap, Y.S. <i>et al.</i> (2009) A monoclonal antibody selection for immunohistochemical examination of lymphoid tissues from non-human primates. <u>J Histochem Cytochem. 57:</u>	

7. Gibbings, D.J. et al. (2007) CD8 alpha is expressed by human monocytes and

enhances Fc gamma R-dependent responses. BMC Immunol. 8: 12.

- 8. Junker, A. *et al.* (2007) Multiple sclerosis: T-cell receptor expression in distinct brain regions. Brain. 130: 2789-99.
- 9. Held, K. *et al.* (2011) Expression of herpes simplex virus 1-encoded microRNAs in human trigeminal ganglia and their relation to local T-cell infiltrates. <u>J Virol. 85 (19):</u> 9680-5.
- 10. Hood SP *et al.* (2014) Changes in immune cell populations in the periphery and liver of GBV-B-infected and convalescent tamarins (*Saguinus labiatus*). <u>Virus Res. 179:</u> 93-101.
- 11. Nelson, M. & Loveday, M. (2014) Exploring the innate immunological response of an alternative nonhuman primate model of infectious disease; the common marmoset. <u>J. Immunol Res. 2014: 913632.</u>
- 12. Manivannan, K. *et al.* (2016) CADM1/TSLC1 Identifies HTLV-1-Infected Cells and Determines Their Susceptibility to CTL-Mediated Lysis. <u>PLoS Pathog. 12 (4): e1005560.</u>
- 13. Gross, C.C. *et al.* (2016) Impaired NK-mediated regulation of T-cell activity in multiple sclerosis is reconstituted by IL-2 receptor modulation. <u>Proc Natl Acad Sci U S A. 113 (21):</u> E2973-82.
- 14. Dunham, J. *et al.* (2016) Blockade of CD127 Exerts a Dichotomous Clinical Effect in Marmoset Experimental Autoimmune Encephalomyelitis. <u>J Neuroimmune Pharmacol. 11</u> (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. <u>J Alzheimers Dis. 55 (1):</u> 101-113.

#### **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**

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**Health And Safety** Material Safety Datasheet documentation #10041 available at: Information https://www.bio-rad-antibodies.com/SDS/MCA1226PBT 10041 Regulatory For research purposes only

# **Related Products**

## **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Pacific Blue® (MCA928PB)

### **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

North & South Tel: +1 800 265 7376 America

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739

Tel: +49 (0) 89 8090 95 21 Europe

Fax: +1 919 878 3751

Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

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 'M364977:200529'

### Printed on 07 Mar 2025

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