

# Datasheet: MCA1226PB

**BATCH NUMBER 0815**

|                      |                                    |
|----------------------|------------------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD8:Pacific Blue® |
| <b>Specificity:</b>  | CD8                                |
| <b>Format:</b>       | Pacific Blue®                      |
| <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 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 Reactivity | Reacts with: Marmoset, Chimpanzee, Cynomolgus monkey, Re<br><b>N.B.</b> Antibody reactivity and working conditions may vary between<br>reactivity is derived from testing within our laboratories, peer-re<br>personal communications from the originators. Please refer to r<br>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                                                                                                                                                                                                                                                                             |                     |                   |

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide<br>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_566892                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <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 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or cells or 100ul 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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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.](#)

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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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|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10041 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/MCA1226PB">https://www.bio-rad-antibodies.com/SDS/MCA1226PB</a> |
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|-------------------|----------------------------|
| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Pacific Blue® \(MCA928PB\)](#)

### 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)  
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