

## Datasheet: MCA1226A488T

|                      |                                       |
|----------------------|---------------------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD8:Alexa Fluor® 488 |
| <b>Specificity:</b>  | CD8                                   |
| <b>Format:</b>       | ALEXA FLUOR® 488                      |
| <b>Product Type:</b> | Monoclonal Antibody                   |
| <b>Clone:</b>        | LT8                                   |
| <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>                 | Human                                                                                                                                                         |                                   |                                 |
| <b>Species Cross Reactivity</b>       | Reacts with: Marmoset, Chimpanzee, Cynomolgus monkey, Red-bellied Tamarin<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species. |                                   |                                 |
| <b>Product Form</b>                   | Purified IgG conjugated to Alexa Fluor® 488 - liquid                                                                                                          |                                   |                                 |
| <b>Max Ex/Em</b>                      | <b>Fluorophore</b><br>Alexa Fluor®488                                                                                                                         | <b>Excitation Max (nm)</b><br>495 | <b>Emission Max (nm)</b><br>519 |
| <b>Preparation</b>                    | Purified IgG prepared by ion exchange chromatography                                                                                                          |                                   |                                 |
| <b>Buffer Solution</b>                | 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>        | <b>UniProt:</b>                                                                                                                                               |                                   |                                 |

[P01732](#)      [Related reagents](#)

[P10966](#)      [Related reagents](#)

**Entrez Gene:**

[925](#)    CD8A    [Related reagents](#)

[926](#)    CD8B    [Related reagents](#)

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <b>Synonyms</b>        | CD8B1, MAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <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 enhances Fc gamma R-dependent responses. <a href="#">BMC Immunol. 8: 12.</a></li><li>8. Junker, A. <i>et al.</i> (2007) Multiple sclerosis: T-cell receptor expression in distinct brain regions. <a href="#">Brain. 130: 2789-99.</a></li><li>9. Held, K. <i>et al.</i> (2011) Expression of herpes simplex virus 1-encoded microRNAs in human trigeminal ganglia and their relation to local T-cell infiltrates. <a href="#">J Virol. 85 (19): 9680-5.</a></li><li>10. Hood SP <i>et al.</i> (2014) Changes in immune cell populations in the periphery and liver of GBV-B-infected and convalescent tamarins (<i>Saguinus labiatus</i>). <a href="#">Virus Res. 179: 93-101.</a></li><li>11. Nelson, M. &amp; Loveday, M. (2014) Exploring the innate immunological response of an alternative nonhuman primate model of infectious disease; the common marmoset. <a href="#">J Immunol Res. 2014: 913632.</a></li><li>12. Manivannan, K. <i>et al.</i> (2016) CADM1/TSLC1 Identifies HTLV-1-Infected Cells and Determines Their Susceptibility to CTL-Mediated Lysis. <a href="#">PLoS Pathog. 12 (4): e1005560.</a></li><li>13. Gross, C.C. <i>et al.</i> (2016) Impaired NK-mediated regulation of T-cell activity in multiple sclerosis is reconstituted by IL-2 receptor modulation. <a href="#">Proc Natl Acad Sci U S A. 113 (21): E2973-82.</a></li><li>14. Dunham, J. <i>et al.</i> (2016) Blockade of CD127 Exerts a Dichotomous Clinical Effect in Marmoset Experimental Autoimmune Encephalomyelitis. <a href="#">J Neuroimmune Pharmacol. 11 (1): 73-83.</a></li><li>15. Bughani, U. <i>et al.</i> (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. <a href="#">PLoS One. 12 (7): e0180088.</a></li><li>16. Philippens, I.H. <i>et al.</i> (2017) Acceleration of Amyloidosis by Inflammation in the Amyloid-Beta</li></ol> |

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| <b>Storage</b> | Store at +4°C or at -20°C if preferred.<br><br>This product should be stored undiluted.<br><br>Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.<br><br>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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| <b>Shelf Life</b> | 18 months from date of despatch. |
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|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Acknowledgements</b> | 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 <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a> |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10041 available at:<br>10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a> |
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|                   |                            |
|-------------------|----------------------------|
| <b>Regulatory</b> | For research purposes only |
|-------------------|----------------------------|

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA928A488\)](#)

### Recommended Useful Reagents

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

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

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
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