

# Datasheet: MCA55A488

**BATCH NUMBER 1702**

<b>Description:</b>	MOUSE ANTI RAT CD4 (DOMAIN 1):Alexa Fluor® 488
<b>Specificity:</b>	CD4 (DOMAIN 1)
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	W3/25
<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

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>	Rat		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 488 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®488	495	519
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide		
	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		

Immunogen	Rat Thymocyte Membrane Glycoproteins.
External Database Links	<p><b>UniProt:</b>  <a href="#">P05540</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">24932</a>    Cd4    <a href="#">Related reagents</a></p>
RRID	AB_323825
Fusion Partners	Spleen cells from immunized BALB/c mouse were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	<p><b>Mouse anti Rat CD4 antibody, clone W3/25</b> recognizes the rat CD4 cell surface glycoprotein, a ~55 kDa molecule expressed by helper T cells and weakly by monocytes. This antibody inhibits proliferation and IL-2 production in the MLR reaction.</p> <p>Mouse anti Rat CD4 antibody, clone W3/25 has been described reacting with paraffin-embedded material following PLP fixation (periodate-lysine-paraformaldehyde) (<a href="#">Whiteland et al. 1995</a>).</p> <p>Mouse anti Rat CD4 antibody, clone W3/25 is routinely tested in flow cytometry on rat splenocytes.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol style="list-style-type: none"> <li>Williams, A.F. <i>et al.</i> (1977) Analysis of cell surfaces by xenogeneic myeloma-hybrid antibodies: differentiation antigens of rat lymphocytes. <a href="#">Cell. 12 (3): 663-73.</a></li> <li>Barclay, A.N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. <a href="#">Immunology. 42 (4): 593-600.</a></li> <li>Whiteland, J.L. <i>et al.</i> (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. <a href="#">J Histochem Cytochem. 43 (3): 313-20.</a></li> <li>Pelegri, C. <i>et al.</i> (1995) Immunohistochemical changes in synovial tissue during the course of adjuvant arthritis. <a href="#">J Rheumatol. 22 (1): 124-32.</a></li> <li>Hofmann, N. <i>et al.</i> (2002) Increased expression of ICAM-1, VCAM-1, MCP-1, and MIP-1 alpha by spinal perivascular macrophages during experimental allergic encephalomyelitis in rats. <a href="#">BMC Immunol. 3: 11.</a></li> <li>Zilka, N. <i>et al.</i> (2009) Human misfolded truncated tau protein promotes activation of microglia and leukocyte infiltration in the transgenic rat model of tauopathy. <a href="#">J Neuroimmunol. 209 (1-2): 16-25.</a></li> <li>Schwartzkopff, J. <i>et al.</i> (2010) NK cell depletion delays corneal allograft rejection in baby rats. <a href="#">Mol Vis. 16: 1928-35.</a></li> <li>Banerjee, S. <i>et al.</i> (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. <a href="#">Br J Ophthalmol. 87 (12): 1515-22.</a></li> <li>Bjersing, J.L. <i>et al.</i> (2002) Loss of ileal IgA+ plasma cells and of CD4+ lymphocytes in ileal Peyer's patches of vitamin A deficient rats. <a href="#">Clin Exp Immunol. 130 (3): 404-8.</a></li> </ol>

<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	<p>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></p>
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA55A488">https://www.bio-rad-antibodies.com/SDS/MCA55A488</a></p> <p>10041</p>
<b>Regulatory</b>	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA1209A488\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
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