

## Datasheet: MCA55R

**BATCH NUMBER 150611**

<b>Description:</b>	MOUSE ANTI RAT CD4 (DOMAIN 1)
<b>Specificity:</b>	CD4 (DOMAIN 1)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	W3/25
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.25 mg

## 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	▪			1/100 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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.

(1)PLP fixation is recommended for optimal results, see [Whiteland et al.](#) for details

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Rat Thymocyte Membrane Glycoproteins.
<b>External Database Links</b>	<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>
<b>RRID</b>	AB_322606
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mouse were fused with cells of the mouse NS-1 myeloma cell line.
<b>Specificity</b>	<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>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<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>Pelegrí, 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</a></li> </ol>

[Neuroimmunol. 209 \(1-2\): 16-25.](#)

7. Schwartzkopff, J. *et al.* (2010) NK cell depletion delays corneal allograft rejection in baby rats. [Mol Vis. 16: 1928-35.](#)

8. Banerjee, S. *et al.* (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. [Br J Ophthalmol. 87 \(12\): 1515-22.](#)

9. Bjersing, J.L. *et al.* (2002) Loss of ileal IgA+ plasma cells and of CD4+ lymphocytes in ileal Peyer's patches of vitamin A deficient rats. [Clin Exp Immunol. 130 \(3\): 404-8.](#)

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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. 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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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA55R>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

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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](http://bio-rad-antibodies.com/datasheets)

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