

Datasheet: MCA55G

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

Product Details

RRID AB_321377

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.

	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**

Target Species	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Rat Thymocyte Membrane Glycoproteins.
External Database Links	<p>UniProt: P05540 Related reagents</p> <p>Entrez Gene: 24932 Cd4 Related reagents</p>
Fusion Partners	Spleen cells from immunized BALB/c mouse were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	<p>Mouse anti Rat CD4 antibody, clone W3/25 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) (Whiteland et al. 1995).</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 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Williams, A.F. <i>et al.</i> (1977) Analysis of cell surfaces by xenogeneic myeloma-hybrid antibodies: differentiation antigens of rat lymphocytes. Cell. 12 (3): 663-73. Barclay, A.N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. Immunology. 42 (4): 593-600. 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. J Histochem Cytochem. 43 (3): 313-20. Pelegrí, C. <i>et al.</i> (1995) Immunohistochemical changes in synovial tissue during the course of adjuvant arthritis. J Rheumatol. 22 (1): 124-32. 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. BMC Immunol. 3: 11. 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. J Neuroimmunol. 209 (1-2): 16-25. Schwartzkopff, J. <i>et al.</i> (2010) NK cell depletion delays corneal allograft rejection in baby rats. Mol Vis. 16: 1928-35. Banerjee, S. <i>et al.</i> (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. Br J Ophthalmol. 87 (12): 1515-22. 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. Clin Exp Immunol. 130 (3): 404-8.
Storage	<p>Store at +4°C for one month or at -20°C for longer.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	18 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),
[DyLight®800](#), [FITC](#), [HRP](#)

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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