

Datasheet: MCA55XZ

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

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/100 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			
Functional Assays	▪			

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	None present

Stabilisers

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Rat Thymocyte Membrane Glycoproteins.

External Database Links

UniProt:
[P05540](#) [Related reagents](#)

Entrez Gene:
[24932](#) Cd4 [Related reagents](#)

RRID AB_321378

Fusion Partners Spleen cells from immunized BALB/c mouse were fused with cells of the mouse NS-1 myeloma cell line.

Specificity

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.

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](#)).

Mouse anti Rat CD4 antibody, clone W3/25 is routinely tested in flow cytometry on rat splenocytes.

Flow Cytometry Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

1. Williams, A.F. *et al.* (1977) Analysis of cell surfaces by xenogeneic myeloma-hybrid antibodies: differentiation antigens of rat lymphocytes. [Cell. 12 \(3\): 663-73.](#)
2. Barclay, A.N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. [Immunology. 42 \(4\): 593-600.](#)
3. Whiteland, J.L. *et al.* (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.](#)
4. Pelegrí, C. *et al.* (1995) Immunohistochemical changes in synovial tissue during the course of adjuvant arthritis. [J Rheumatol. 22 \(1\): 124-32.](#)
5. Hofmann, N. *et al.* (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.](#)
6. Zilka, N. *et al.* (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.](#)

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.](#)

Storage Store at -20°C only.

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10162 available at: 10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.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:Preservative Free \(MCA1209XZ\)](#)

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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