

Datasheet: MCA55P647

Description:	MOUSE ANTI RAT CD4 (DOMAIN 1):RPE-Alexa Fluor® 647
Specificity:	CD4 (DOMAIN 1)
Format:	RPE-ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	W3/25
Isotype:	IgG1
Quantity:	100 TESTS/1ml

Product Details

RRID AB_871975

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	■			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.

Target Species Rat

Product Form Purified IgG conjugated to R. Phycoerythrin (RPE) - Alexa Fluor® 647 - lyophilized

Reconstitution Reconstitute with 1.0 ml distilled water

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE-Alexa Fluor®647 488nm laser	496	667
	RPE-Alexa Fluor®647 561nm laser	546	667

Preparation Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide

Stabilisers 1% Bovine Serum Albumin
5% Sucrose

Immunogen Rat Thymocyte Membrane Glycoproteins.

**External Database
Links**

UniProt:

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

Entrez Gene:

[24932](#) Cd4 [Related reagents](#)

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 10⁶ 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 +4°C.
DO NOT FREEZE
This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of reconstitution.

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #10075 available at:
10075: <https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf>

Regulatory

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