

Datasheet: MCA48FB

Description:	MOUSE ANTI RAT CD8 ALPHA:FITC
Specificity:	CD8 ALPHA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	OX-8
Isotype:	IgG1
Quantity:	0.5 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	▪			1/5 - 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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml		

Immunogen	Rat thymocyte membrane glycoproteins.
External Database Links	<p>UniProt: P07725 Related reagents</p> <p>Entrez Gene: 24930 Cd8a Related reagents</p>
RRID	AB_566913
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<p>Mouse anti Rat CD8α, clone MRC OX-8, recognizes the rat CD8 alpha cell surface antigen, expressed by a subset of T lymphocytes, most thymocytes and the majority of NK cells.</p> <p>Mouse anti Rat CD8α, clone MRC OX-8 is suitable for use in <i>in vitro</i> blocking assays (Popov <i>et al.</i> 2001).</p> <p>Mouse anti Rat CD8α, clone MRC OX-8 reacts with paraffin-embedded material following PLP Fixation (periodate-lysine paraformaldehyde) (Whiteland <i>et al.</i> 1995).</p> <p>Mouse anti Rat CD8α, clone MRC OX-8 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"> 1. Thomas, M.L. & Green, J.R. (1983) Molecular nature of the W3/25 and MRC OX-8 marker antigens for rat T lymphocytes: comparisons with mouse and human antigens. Eur J Immunol. 13 (10): 855-8. 2. Bukovský A <i>et al.</i> (1984) Association of some cell surface antigens of lymphoid cells and cell surface differentiation antigens with early rat pregnancy. Immunology. 52 (4): 631-40. 3. Torres-Nagel, N. <i>et al.</i> (1992) Differential thymus dependence of rat CD8 isoform expression. Eur J Immunol. 22 (11): 2841-8. 4. 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. 5. Mitnacht, R. <i>et al.</i> (1998) Opposite CD4/CD8 lineage decisions of CD4+8+ mouse and rat thymocytes to equivalent triggering signals: correlation with thymic expression of a truncated CD8 alpha chain in mice but not rats. J Immunol. 160 (2): 700-7. 6. Popov, I. <i>et al.</i> (2001) The effect of an anti-HLA-B27 immune response on CTL recognition of <i>Chlamydia</i>. J Immunol. 167 (6): 3375-82. 7. Hashimoto, Y. <i>et al.</i> (2003) Two major histocompatibility complex class I-restricted epitopes of the Borna disease virus p10 protein identified by cytotoxic T lymphocytes induced by DNA-based immunization. J Virol. 77: 6076-81.

8. Bradl, M. *et al.* (2005) Complementary contribution of CD4 and CD8 T lymphocytes to T-cell infiltration of the intact and the degenerative spinal cord. [Am J Pathol. 166: 1441-50.](#)
9. Latta, M. *et al.* (2007) CXCR6 is expressed on T cells in both T helper type 1 (Th1) inflammation and allergen-induced Th2 lung inflammation but is only a weak mediator of chemotaxis. [Immunology. 121: 555-64](#)
10. King, G.D. *et al.* (2008) Flt3L in combination with HSV1-TK-mediated gene therapy reverses brain tumor-induced behavioral deficits. [Mol Ther. 16: 682-90](#)
11. Bode, U. *et al.* (2008) Dendritic cell subsets in lymph nodes are characterized by the specific draining area and influence the phenotype and fate of primed T cells. [Immunology. 123: 480-90.](#)
12. Schwartzkopff, J. *et al.* (2010) NK cell depletion delays corneal allograft rejection in baby rats. [Mol Vis. 16: 1928-35.](#)
13. Sanchez-Guajardo, V. (2010) Microglia acquire distinct activation profiles depending on the degree of alpha-synuclein neuropathology in a rAAV based model of Parkinson's disease. [PLoS One. 5: e8784.](#)
14. Maenz, M. *et al.* (2011) A comprehensive flow-cytometric analysis of graft infiltrating lymphocytes, draining lymph nodes and serum during the rejection phase in a fully allogeneic rat cornea transplant model. [Mol Vis. 2011 Feb 8;17:420-9.](#)
15. Arndt, T. *et al.* (2013) A variable CD3⁺ T-cell frequency in peripheral blood lymphocytes associated with type 1 diabetes mellitus development in the LEW.1AR1-iddm rat. [PLoS One. 8 \(5\): e64305.](#)
16. Granados-Durán P *et al.* (2015) Neuroinflammation induced by intracerebroventricular injection of microbial neuraminidase. [Front Med \(Lausanne\). 2: 14.](#)
17. Nuccitelli R *et al.* (2015) Nanoelectroablation of Murine Tumors Triggers a CD8-Dependent Inhibition of Secondary Tumor Growth. [PLoS One. 10 \(7\): e0134364.](#)
18. Zhang, Z.M. *et al.* (2016) Lesional accumulation of CD8(+) cells in sciatic nerves of experimental autoimmune neuritis rats. [Neurol Sci. 37 \(2\): 199-203.](#)
19. Pamukcu, O. *et al.* (2016) Anti-inflammatory role of obestatin in autoimmune myocarditis. [Clin Exp Pharmacol Physiol. 43 \(1\): 47-55.](#)
20. Dabrowska, S. *et al.* (2019) Human bone marrow mesenchymal stem cell-derived extracellular vesicles attenuate neuroinflammation evoked by focal brain injury in rats. [J Neuroinflammation. 16 \(1\): 216.](#)
21. James, R.E. *et al.* (2020) Persistent elevation of intrathecal pro-inflammatory cytokines leads to multiple sclerosis-like cortical demyelination and neurodegeneration. [Acta Neuropathol Commun. 8 \(1\): 66.](#)
22. Matsuyama, S. *et al.* (2021) Properties of macrophages and lymphocytes appearing in rat renal fibrosis followed by repeated injection of cisplatin. [J Vet Med Sci. 83 \(9\): 1435-42.](#)
23. Dabrowska, S. *et al.* (2021) Neuroinflammation evoked by brain injury in a rat model of lacunar infarct. [Exp Neurol. 336: 113531.](#)
24. Schmiedl, A. *et al.* (2021) Lung development and immune status under chronic LPS exposure in rat pups with and without CD26/DPP4 deficiency. [Cell Tissue Res. 386 \(3\): 617-36.](#)
25. Zakerkish, F. *et al.* (2021) Differential effects of the immunosuppressive calcineurin inhibitors cyclosporine-A and tacrolimus on ovulation in a murine model. [Hum Reprod Open. 2021 \(2\): hoab012.](#)
26. Lane, E.L. *et al.* (2022) Spontaneous Graft-Induced Dyskinesias Are Independent of 5-HT Neurons and Levodopa Priming in a Model of Parkinson's Disease. [Mov Disord. 37](#)

(3): 613-9.

27. Silva, B.A. *et al.* (2022) Understanding the role of the blood brain barrier and peripheral inflammation on behavior and pathology on ongoing confined cortical lesions. [Mult Scler Relat Disord. 57: 103346.](#)

28. Hoff, U. *et al.* (2022) The mTOR inhibitor Rapamycin protects from premature cellular senescence early after experimental kidney transplantation. [PLoS One. 17 \(4\): e0266319.](#)

29. Gad, R.A. *et al.* (2022) Mitigating effects of *Passiflora incarnata*. on oxidative stress and neuroinflammation in case of pilocarpine-Induced status epilepticus model [J King Saud Uni - Science. 34 \(3\): 101886.](#)

30. Cakala-Jakimowicz, M. & Puzianowska-Kuznicka, M. (2022) Towards Understanding the Lymph Node Response to Skin Infection with Saprophytic *Staphylococcus epidermidis*. [Biomedicines. 10 \(5\): 1021.](#)

Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA48FB 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

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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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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Printed on 19 Oct 2023