

Datasheet: MCA48R

BATCH NUMBER 151001

Description:	MOUSE ANTI RAT CD8 ALPHA
Specificity:	CD8 ALPHA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-8
Isotype:	IgG1
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
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.

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: P07725 Related reagents</p> <p>Entrez Gene: 24930 Cd8a Related reagents</p>
RRID	AB_2260088
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 studies (Popov et al.2001).</p> <p>Mouse anti Rat CD8α, clone MRC OX-8 has been described reacting with paraffin-embedded material following PLP Fixation (periodate-lysine paraformaldehyde) (Whiteland et al. 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.
Immunohistology	<p>This product does not require protein digestion pre-treatment of paraffin embedded sections.</p> <p>This product does not require antigen retrieval using heat treatment prior to staining of paraffin embedded sections.</p>
References	<ol style="list-style-type: none"> 1. Brideau, R.J. <i>et al.</i> (1980) Two subsets of rat T lymphocytes defined with monoclonal antibodies. Eur J Immunol. 10 (8): 609-15. 2. Lyscom, N. & Brueton, M.J. (1982) Intraepithelial, lamina propria and Peyer's patch lymphocytes of the rat small intestine: isolation and characterization in terms of immunoglobulin markers and receptors for monoclonal antibodies. Immunology. 45 (4): 775-83. 3. 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.](#)

4. Bukovský A *et al.* (1984) Association of some cell surface antigens of lymphoid cells and cell surface differentiation antigens with early rat pregnancy. [Immunology. 52 \(4\): 631-40.](#)
5. Popov, I. *et al.* (2001) The effect of an anti-HLA-B27 immune response on CTL recognition of Chlamydia. [J Immunol. 167 \(6\): 3375-82.](#)
6. Mitnacht, R. *et al.* (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.](#)
7. 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.](#)
8. Torres-Nagel, N. *et al.* (1992) Differential thymus dependence of rat CD8 isoform expression. [Eur J Immunol. 22 \(11\): 2841-8.](#)
9. 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.](#)
10. Schwartzkopff, J. *et al.* (2010) NK cell depletion delays corneal allograft rejection in baby rats. [Mol Vis. 16: 1928-35.](#)
11. Banerjee, S. *et al.* (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. [Br J Ophthalmol. 87: 1515-22.](#)
12. 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.](#)
13. 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.](#)
14. Granados-Durán P *et al.* (2015) Neuroinflammation induced by intracerebroventricular injection of microbial neuraminidase. [Front Med \(Lausanne\). 2: 14.](#)
15. Nuccitelli R *et al.* (2015) Nanoelectroablation of Murine Tumors Triggers a CD8-Dependent Inhibition of Secondary Tumor Growth. [PLoS One. 10 \(7\): e0134364.](#)
16. 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.](#)
17. Pamukcu, O. *et al.* (2016) Anti-inflammatory role of obestatin in autoimmune myocarditis. [Clin Exp Pharmacol Physiol. 43 \(1\): 47-55.](#)
18. 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.](#)
19. 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.](#)
20. 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.](#)

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.

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/MCA48R 10040
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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 \(MCA1209\)](#)

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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