

Datasheet: MCA48G

BATCH NUMBER 1606

Description:	MOUSE ANTI RAT CD8 ALPHA
Specificity:	CD8 ALPHA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-8
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
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_321476
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
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA48G10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
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
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	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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