

# Datasheet: MCA48PE BATCH NUMBER 165699

Description:	MOUSE ANTI RAT CD8 ALPHA:RPE		
Specificity:	CD8 ALPHA		
Format:	RPE		
Product Type:	Monoclonal Antibody		
Clone:	OX-8		
Isotype:	lgG1		
Quantity:	100 TESTS		

# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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.

Breadward Farmer D. (C. 11. O 1. 1. D. D (DDF)	
Product Form Purified IgG conjugated to R. Phycoerythrin (RPE) - lyoph	nilized
Reconstitution Reconstitute with 1 ml distilled water	
Max Ex/Em Fluorophore Excitation Max (nm) Emission Ma	x (nm)
RPE 488nm laser 496 578	
Preparation Purified IgG prepared by affinity chromatography on Prote	ein G fi
Buffer Solution Phosphate buffered saline	
Preservative 0.09% Sodium Azide	
Stabilisers 1% Bovine Serum Albumin	
Immunogen Rat thymocyte membrane glycoproteins.	

# External Database

Links

**UniProt:** 

P07725 Related reagents

**Entrez Gene:** 

24930 Cd8a Related reagents

**RRID** 

AB 321480

#### **Fusion Partners**

Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

#### **Specificity**

**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.

Mouse anti Rat CD8α, clone MRC OX-8 is suitable for use in *in vitro* blocking assays (<u>Popov et al.2001</u>).

Mouse anti Rat CD8α, clone MRC OX-8 reacts with paraffin-embedded material following PLP Fixation (periodate-lysine paraformaldehyde) (Whiteland et al. 1995).

Mouse anti Rat CD8 $\alpha$ , clone MRC OX-8 is routinely tested in flow cytometry on rat splenocytes.

#### Flow Cytometry

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul

### References

- 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. <u>Eur J Immunol. 13 (10): 855-8.</u>
- 2. Bukovský A *et al.* (1984) Association of some cell surface antigens of lymphoid cells and cell surface differentiation antigens with early rat pregnancy. <u>Immunology. 52 (4):</u> 631-40.
- 3. Torres-Nagel, N. *et al.* (1992) Differential thymus dependence of rat CD8 isoform expression. <u>Eur J Immunol. 22 (11): 2841-8.</u>
- 4. 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. <u>J</u> Histochem Cytochem. 43 (3): 313-20.
- 5. 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.
- 6. Popov, I. *et al.* (2001) The effect of an anti-HLA-B27 immune response on CTL recognition of *Chlamydia*. <u>J Immunol. 167 (6): 3375-82.</u>
- 7. Hashimoto, Y. *et al.* (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. <u>J Virol. 77: 6076-81.</u>
- 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. <a href="https://linear.com/line
- 10. King, G.D. *et al.* (2008) Flt3L in combination with HSV1-TK-mediated gene therapy reverses brain tumor-induced behavioral deficits. <u>Mol Ther. 16: 682-90</u>
- 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<sup>+</sup> 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. <u>Front Med (Lausanne)</u>. 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. <u>Neurol Sci. 37 (2): 199-203.</u>
- 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. <u>J Neuroinflammation</u>. 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. <u>Acta Neuropathol Commun. 8 (1): 66.</u>
- 22. Matsuyama, S. *et al.* (2021) Properties of macrophages and lymphocytes appearing in rat renal fibrosis followed by repeated injection of cisplatin. <u>J Vet Med Sci. 83 (9): 1435-42.</u>
- 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. <u>Cell Tissue Res. 386 (3):</u> 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. <u>Hum Reprod</u> 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. <u>Mov Disord. 37</u> (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. <u>PLoS One. 17 (4): e0266319.</u> 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 <u>J King Saud Uni - Science. 34 (3): 101886.</u>

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

#### **Storage**

Prior to reconstitution store at +4°C. Following reconstitution 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 despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA48PE">https://www.bio-rad-antibodies.com/SDS/MCA48PE</a> 20487
Regulatory	For research purposes only

#### Related Products

## **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: RPE (MCA1209PE)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody sales us@bio-rad.com

Email: antibody sales uk@bio-rad.com

Email: antibody sales de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M405949:220916'

#### Printed on 05 Feb 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint