

# Datasheet: MCA48R BATCH NUMBER 151001

| Description:  | MOUSE ANTI RAT CD8 ALPHA |
|---------------|--------------------------|
| Specificity:  | CD8 ALPHA                |
| Format:       | Purified                 |
| Product Type: | Monoclonal Antibody      |
| Clone:        | OX-8                     |
| Isotype:      | lgG1                     |
| 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|                            | 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 supernatant. | A from tissue culture |
| Buffer Solution             | Phosphate buffered saline  |                       |
| Preservative<br>Stabilisers | 0.09% Sodium Azide   |                       |

| Carrier Free                      | Yes  |  |  |  |
|-----------------------------------|--|--|--|--|
| Approx. Protein<br>Concentrations | IgG concentration 1.0 mg/ml  |  |  |  |
| Immunogen                         | Rat thymocyte membrane glycoproteins.  |  |  |  |
| External Database<br>Links        | UniProt: P07725 Related reagents   |  |  |  |
|                                   | Entrez Gene:  24930 Cd8a Related reagents  |  |  |  |
| RRID                              | AB_2260088   |  |  |  |
| 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 <i>in vitro</i> blocking studies ( <u>Popov et al.2001</u> ).   |  |  |  |
|                                   | Mouse anti Rat CD8α, clone MRC OX-8 has been described reacting with paraffinembedded 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.  |  |  |  |
| Immunohistology                   | This product does not require protein digestion pre-treatment of paraffin embedded sections.  This product does not require antigen retrieval using heat treatment prior to staining of paraffin embedded sections.  |  |  |  |
| References                        | <ol> <li>Brideau, R.J. <i>et al.</i> (1980) Two subsets of rat T lymphocytes defined with monoclonal antibodies. <u>Eur J Immunol. 10 (8): 609-15.</u></li> <li>Lyscom, N. &amp; 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. <u>Immunology. 45 (4): 775-83.</u></li> <li>Whiteland, J.L. <i>et al.</i> (1995) Immunohistochemical detection of T-cell subsets and other</li> </ol> |  |  |  |

leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies.  $\underline{\textbf{J}}$ 

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- 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. <u>J Immunol. 160 (2): 700-7.</u>
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- 15. Nuccitelli R *et al.* (2015) Nanoelectroablation of Murine Tumors Triggers a CD8-Dependent Inhibition of Secondary Tumor Growth. <u>PLoS One. 10 (7): e0134364.</u>
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- 17. Pamukcu, O. *et al.* (2016) Anti-inflammatory role of obestatin in autoimmune myocarditis. <u>Clin Exp Pharmacol Physiol. 43 (1): 47-55.</u>
- 18. 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.
- 19. 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. <u>PLoS One. 8 (5): e64305.</u>
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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<br>Information | Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA48R">https://www.bio-rad-antibodies.com/SDS/MCA48R</a> 10040 |
| Regulatory                       | For research purposes only   |

## Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE

Goat Anti Mouse IgG (STAR76...)

RPE

Rabbit Anti Mouse IgG (STAR13...)

HRP

Goat Anti Mouse IgG (STAR70...)

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 Tel: +1 800 265 7376 America Fax: +1 919 878 3751 Worldwide

Tel: +44 (0)1865 852 700

Europe

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

Email: antibody\_sales\_us@bio-rad.com

Fax: +44 (0)1865 852 739
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

'M368062:200529'

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