

# Datasheet: MCA273R

## **BATCH NUMBER 1512**

Description: MOUSE ANTI RAT CD25	
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-39
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	•			1/10 - 1/50
Immunohistology - Frozen	•			
Immunohistology - Paraffin (1)				
ELISA	•			
Immunoprecipitation	•			
Western Blotting			•	

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.

(1)PLP fixation is recommended, see Whiteland. J.L. et al.(1995) for details.

Target Species	Rat	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein A f supernatant	rom tissue culture
Buffer Solution	Phosphate buffered saline	

Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Stimulated Rat T cells
External Database Links	UniProt: P26897 Related reagents  Entrez Gene: 25704 Il2ra Related reagents
RRID	AB_324114
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the NS0/1 mouse myeloma cell line.
Specificity	Mouse anti Rat CD25 antibody, clone OX-39 recognizes the alpha chain of rat CD25, otherwise known as IL-2 receptor alpha, a ~55 kDa type I membrane glycoprotein, expressed by activated T cells but not resting lymphocytes. CD25 is also expressed by dendritic cells found in the thymus medulla.  Mouse anti Rat CD25 antibody, clone OX-39 has been described reacting with paraffinembedded material following PLP fixation (periodate-lysine-paraformaldehyde).  Mouse anti Rat CD25 antibody, clone OX-39 has been shown to weakly inhibit the binding of IL-2 to Con-A stimulated spleen blasts (Paterson et al. 1987).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Paterson, D.J. <i>et al.</i> (1987) Antigens of activated rat T lymphocytes including a molecule of 50,000 Mr detected only on CD4 positive T blasts. Mol Immunol. 24 (12): 1281-90.</li> <li>Charteris DG &amp; Lightman SL (1993) <i>In vivo</i> lymphokine production in experimental autoimmune uveoretinitis. Immunology. 78 (3): 387-92.</li> <li>Hayosh, N.S. &amp; Swanborg, R.H. (1987) Autoimmune effector cells. IX. Inhibition of adoptive transfer of autoimmune encephalomyelitis with a monoclonal antibody specific for interleukin 2 receptors. J Immunol. 138 (11): 3771-5.</li> <li>Tellides, G. <i>et al.</i> (1987) Functional blocking of the interleukin-2 receptor (IL-2R) may be important in the efficacy of IL-2R antibody therapy. Transplant Proc. 19 (5): 4231-3.</li> <li>Signore, A. <i>et al.</i> (1987) Detection of activated lymphocytes in endocrine pancreas of BB/W rats by injection of 123I-interleukin-2: an early sign of type 1 diabetes. Lancet. 2</li> </ol>

6. Whiteland, J.L. et al. (1995) Immunohistochemical detection of T-cell subsets and other

(8558): 537-40.

leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. <u>J</u> Histochem Cytochem. 43 (3): 313-20.

- 7. Schwartzkopff, J. *et al.* (2010) NK cell depletion delays corneal allograft rejection in baby rats. Mol Vis. 16: 1928-35.
- 8. Banerjee, S. *et al.* (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. <u>Br J Ophthalmol. 87 (12): 1515-22.</u>
- 9. Fujiki, M. *et al.* (2010) Induced tolerance to rat liver allografts involves the apoptosis of intragraft T cells and the generation of CD4(+)CD25(+)FoxP3(+) T regulatory cells. <u>Liver Transpl. 16</u>: 147-54.
- 10. Ghiringhelli, F. (2005) Tumor cells convert immature myeloid dendritic cells into TGF-beta-secreting cells inducing CD4+CD25+ regulatory T cell proliferation. <u>J Exp Med.</u> 202: 919-29.
- 11. Aricha, R. *et al.* (2016) Suppression of experimental autoimmune myasthenia gravis by autologous T regulatory cells. <u>J Autoimmun. 67: 57-64.</u>
- 12. Lühder, F. *et al.* (2017) Laquinimod enhances central nervous system barrier functions. Neurobiol Dis. 102: 60-9.
- 13. Sun, J. *et al.* (2017) Pentapeptide PLNPK ameliorates adjuvant arthritis and inhibits T cell activation by suppressing Lck and PI3K activities <u>Int J Clin Exp Pathol. 10(5):</u> 5252-62.
- 14. Timrott, K. *et al.* (2020) The importance of MHC class II in allogeneic bone marrow transplantation and chimerism-based solid organ tolerance in a rat model. <u>PLoS One. 15</u> (5): e0233497.

#### 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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA273R">https://www.bio-rad-antibodies.com/SDS/MCA273R</a> 10040
Regulatory	For research purposes only

# **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

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

HRP

Goat Anti Mouse IgG (STAR76...)

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
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M367388:200529'

#### Printed on 18 Jan 2024

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