

## Datasheet: MCA273A647

<b>Description:</b>	MOUSE ANTI RAT CD25:Alexa Fluor® 647
<b>Specificity:</b>	CD25
<b>Other names:</b>	IL-2R ALPHA CHAIN
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-39
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/1ml

## 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat - 1/5

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 conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
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		
	1%	Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Immunogen	Stimulated Rat T cells
External Database Links	<p><b>UniProt:</b>  <a href="#">P26897</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">25704</a>    IL2ra    <a href="#">Related reagents</a></p>
RRID	AB_324849
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS0/1 mouse myeloma cell line.
Specificity	<p><b>Mouse anti Rat CD25 antibody, clone OX-39</b> 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.</p> <p>Mouse anti Rat CD25 antibody, clone OX-39 has been described reacting with paraffin-embedded material following PLP fixation (periodate-lysine-paraformaldehyde).</p> <p>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 (<a href="#">Paterson et al. 1987</a>).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol style="list-style-type: none"> <li>1. 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. <a href="#">Mol Immunol. 24 (12): 1281-90.</a></li> <li>2. Charteris DG &amp; Lightman SL (1993) <i>In vivo</i> lymphokine production in experimental autoimmune uveoretinitis. <a href="#">Immunology. 78 (3): 387-92.</a></li> <li>3. 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. <a href="#">J Immunol. 138 (11): 3771-5.</a></li> <li>4. 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. <a href="#">Transplant Proc. 19 (5): 4231-3.</a></li> <li>5. 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. <a href="#">Lancet. 2 (8558): 537-40.</a></li> <li>6. 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. <a href="#">J Histochem Cytochem. 43 (3): 313-20.</a></li> <li>7. Schwartzkopff, J. <i>et al.</i> (2010) NK cell depletion delays corneal allograft rejection in baby rats. <a href="#">Mol Vis. 16: 1928-35.</a></li> <li>8. Fujiki, M. <i>et al.</i> (2010) Induced tolerance to rat liver allografts involves the apoptosis of intragraft T cells and the generation of CD4(+)CD25(+)FoxP3(+) T regulatory cells. <a href="#">Liver Transpl. 16: 147-54.</a></li> </ol>

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10. Aricha, R. *et al.* (2016) Suppression of experimental autoimmune myasthenia gravis by autologous T regulatory cells. [J Autoimmun. 67: 57-64.](#)
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12. Sun, J. *et al.* (2017) Pentapeptide PLNPK ameliorates adjuvant arthritis and inhibits T cell activation by suppressing Lck and PI3K activities [Int J Clin Exp Pathol. 10\(5\): 5252-62.](#)
13. 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. [PLoS One. 15 \(5\): e0233497.](#)
14. Koppe, C. *et al.* (2021) Local Inflammatory Response after Intramuscularly Implantation of Anti-Adhesive Plasma-Fluorocarbon-Polymer Coated Ti6Al4V Discs in Rats. [Polymers \(Basel\). 13 \(16\): 2684.](#)
15. Schmiedl, A. *et al.* (2021) Lung development and immune status under chronic LPS exposure in rat pups with and without CD26/DPP4 deficiency. [Cell Tissue Res. 386 \(3\): 617-36.](#)
16. Zakerkish, F. *et al.* (2021) Differential effects of the immunosuppressive calcineurin inhibitors cyclosporine-A and tacrolimus on ovulation in a murine model. [Hum Reprod Open. 2021 \(2\): hoab012.](#)
17. Zhou, X. *et al.* (2022) Dusp6 deficiency attenuates neutrophil-mediated cardiac damage in the acute inflammatory phase of myocardial infarction. [Nat Commun. 13 \(1\): 6672.](#)
18. Hoene, A. *et al.* (2020) Effects of copper-impregnated collagen implants on local pro- and anti-inflammatory and regenerative tissue reactions following implantation in rats. [J Biomed Mater Res A. 108 \(4\): 871-81.](#)

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<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA273A647">https://www.bio-rad-antibodies.com/SDS/MCA273A647</a> 10041
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1209A647\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M385554:210513'

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