Datasheet: MCA273A647

BATCH NUMBER 170482

Description:	MOUSE ANTI RAT CD25:Alexa Fluor® 647
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	OX-39
Isotype:	IgG1
Quantity:	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.

	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

IgG concentration 0.05 mg/ml

Concentrations	
Immunogen	Stimulated Rat T cells
External Database Links	**UniProt:** P26897 Related reagents **Entrez Gene:** 25704 Il2ra Related reagents
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	**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 paraffin-embedded 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 10^6 cells in 100ul.
References	1. Paterson, D.J. *et al.* (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. 2. Charteris DG & Lightman SL (1993) *In vivo* lymphokine production in experimental autoimmune uveoretinitis. Immunology. 78 (3): 387-92. 3. Hayosh, N.S. & 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. 4. Tellides, G. *et al.* (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. 5. Signore, A. *et al.* (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 (8558): 537-40. 6. 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. J 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. 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. Liver Transpl. 16: 147-54.
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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.

Storage

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.

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.

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA273A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA1209A647)

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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