Datasheet: MCA154A647

Description:	MOUSE ANTI RAT CD2:Alexa Fluor® 647
Specificity:	CD2
Other names:	E-ROSETTE RECEPTOR, LFA-2
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	OX-34
Isotype:	IgG2a
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

Where this product 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 product 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 (NaN_3)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

Immunogen	Activated rat T helper cells.
External Database Links	**UniProt:** P08921 Related reagents **Entrez Gene:** 497761 Cd2 Related reagents
RRID	AB_324773
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.
Specificity	**Mouse anti Rat CD2 antibody, clone OX-34** recognizes a determinant on thymocytes and peripheral T-cells but it does not bind to B cells or peritoneal macrophages. The antigen recognized by this antibody is a 50-54 kDa glycoprotein, homolog of the human CD2 antigen (Williams *et al.* 1987).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl

References

1. Williams, A.F. *et al.* (1987) Similarities in sequences and cellular expression between rat CD2 and CD4 antigens. J Exp Med. 165 (2): 368-80.
2. Barclay, A.N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. Immunology. 42 (4): 593-600.
3. 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.
4. Baker, S.C. *et al.* (2011) Cellular Integration and Vascularisation Promoted by a Resorbable, Particulate-Leached, Cross-Linked Poly(ε-caprolactone) Scaffold. Macromol Biosci. 11: 618-27.
5. Romani, P. *et al.* (2009) Cell survival and polarity of *Drosophila* follicle cells require the activity of ecdysone receptor B1 isoform. Genetics. 181: 165-75.
6. Bastock, R. *et al.* (2003) Strabismus is asymmetrically localised and binds to Prickle and Dishevelled during *Drosophila* planar polarity patterning. Development. 130: 3007-14.
7. Brückner, K. *et al.* (2000) Glycosyltransferase activity of Fringe modulates Notch-Delta interactions. Nature. 406: 411-5.
8. Liversidge, J. *et al.* (2002) Nitric oxide mediates apoptosis through formation of peroxynitrite and Fas/Fas-ligand interactions in experimental autoimmune uveitis. Am J Pathol. 160: 905-16.
9. Sarpal, R. *et al.* (2012) Mutational analysis supports a core role for *Drosophila* α-catenin in adherens junction function. J Cell Sci. 125: 233-45.
10. Zhang, H. *et al.* (2011) Basic residues in the T-cell receptor ζ cytoplasmic domain mediate membrane association and modulate signaling. Proc Natl Acad Sci U S A. 108: 19323-8.
11. Heck, B.W. *et al.* (2012) The transcriptional corepressor SMRTER influences both Notch and ecdysone signaling during *Drosophila* development. Biol Open. 1 (3): 182-96.
12. Clark, I.B. *et al.* (2011) Fibroblast growth factor signalling controls successive cell

behaviours during mesoderm layer formation in *Drosophila*. Development. 138: 2705-15.
13. Domanitskaya, E. and Schüpbach, T. (2012) CoREST acts as a positive regulator of Notch signaling in the follicle cells of *Drosophila melanogaster*. J Cell Sci. 125: 399-410.
14. Dragovic, R.A. *et al.* (2015) Isolation of syncytiotrophoblast microvesicles and exosomes and their characterisation by multicolour flow cytometry and fluorescence Nanoparticle Tracking Analysis. Methods. 87: 64-74.
15. Zecca, M. & Struhl, G. (2021) A unified mechanism for the control of *Drosophila.* wing growth by the morphogens Decapentaplegic and Wingless. PLoS Biol. 19 (3): e3001111.

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	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA154A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 (MCA1210A647)

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M431589:240730'

Printed on 30 Jul 2024