

Datasheet: MCA154A647

BATCH NUMBER 0915

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 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 G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein	IgG concentration 0.05 mg/ml		

Concentrations

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 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

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. Stybayeva, G. *et al.* (2010) Lensfree holographic imaging of antibody microarrays for high-throughput detection of leukocyte numbers and function. [Anal Chem. 82: 3736-44.](#)
7. Bastock, R. *et al.* (2003) Strabismus is asymmetrically localised and binds to Prickle and Dishevelled during *Drosophila* planar polarity patterning. [Development. 130: 3007-14.](#)
8. Brückner, K. *et al.* (2000) Glycosyltransferase activity of Fringe modulates Notch-Delta interactions. [Nature. 406: 411-5.](#)
9. 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.](#)
10. 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.](#)
11. 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.](#)

12. 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.](#)
13. Clark, I.B. *et al.* (2011) Fibroblast growth factor signalling controls successive cell behaviours during mesoderm layer formation in *Drosophila*. [Development. 138: 2705-15.](#)
14. 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.](#)
15. 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.](#)
16. 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

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

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

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 \(MCA1210A647\)](#)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

North & South Tel: +1 800 265 7376

America 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

'M365403:200529'

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

Printed on 20 Oct 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)