

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 G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	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 10⁶ 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.](#)
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7. Brückner, K. *et al.* (2000) Glycosyltransferase activity of Fringe modulates Notch-Delta interactions. [Nature. 406: 411-5.](#)
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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.](#)
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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

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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 \(MCA1210A647\)](#)

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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://www.bio-rad-antibodies.com/datasheets)

'M409967:221021'

Printed on 20 Oct 2023

