

Datasheet: MCA154R

BATCH NUMBER 156704

Description:	MOUSE ANTI RAT CD2
Specificity:	CD2
Other names:	E-ROSETTE RECEPTOR, LFA-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-34
Isotype:	IgG2a
Quantity:	0.25 mg

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	▪			1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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.* This clone has been described as reacting with paraffin-embedded material following PLP fixation.

(1)**We recommend the use of [PLP](#) fixation for optimal results, see Whiteland et al.**

Target Species	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Activated rat T helper cells.
External Database Links	<p>UniProt:</p> <p>P08921 Related reagents</p> <p>Entrez Gene:</p> <p>497761 Cd2 Related reagents</p>
RRID	AB_321239
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 <i>et al.</i> 1987).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Williams, A.F. <i>et al.</i> (1987) Similarities in sequences and cellular expression between rat CD2 and CD4 antigens. J Exp Med. 165 (2): 368-80. Barclay, A.N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. Immunology. 42 (4): 593-600. 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. J Histochem Cytochem. 43 (3): 313-20. Baker, S.C. <i>et al.</i> (2011) Cellular Integration and Vascularisation Promoted by a Resorbable, Particulate-Leached, Cross-Linked Poly(ε-caprolactone) Scaffold. Macromol Biosci. 11: 618-27. Romani, P. <i>et al.</i> (2009) Cell survival and polarity of <i>Drosophila</i> follicle cells require the activity of ecdysone receptor B1 isoform. Genetics. 181: 165-75. Stybayeva, G. <i>et al.</i> (2010) Lensfree holographic imaging of antibody microarrays for high-throughput detection of leukocyte numbers and function. Anal Chem. 82: 3736-44. Bastock, R. <i>et al.</i> (2003) Strabismus is asymmetrically localised and binds to Prickle and Dishevelled during <i>Drosophila</i> planar polarity patterning. Development. 130: 3007-14. Brückner, K. <i>et al.</i> (2000) Glycosyltransferase activity of Fringe modulates Notch-Delta interactions. Nature. 406: 411-5. Liversidge, J. <i>et al.</i> (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. 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

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA154R>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA1210\)](#)

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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M365405:200529'

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