

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: P08921 Related reagents</p> <p>Entrez Gene: 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 et al. 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](#)

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

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](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

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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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