

## Datasheet: MCA154R

**BATCH NUMBER 1611**

<b>Description:</b>	MOUSE ANTI RAT CD2
<b>Specificity:</b>	CD2
<b>Other names:</b>	E-ROSETTE RECEPTOR, LFA-2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-34
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.**

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

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Activated rat T helper cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08921</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">497761</a>    Cd2    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_321239
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Rat CD2 antibody, clone OX-34</b> 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 ( <a href="#">Williams et al. 1987</a> ).
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Williams, A.F. <i>et al.</i> (1987) Similarities in sequences and cellular expression between rat CD2 and CD4 antigens. <a href="#">J Exp Med. 165 (2): 368-80.</a></li> <li>Barclay, A.N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. <a href="#">Immunology. 42 (4): 593-600.</a></li> <li>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. <a href="#">J Histochem Cytochem. 43 (3): 313-20.</a></li> <li>Baker, S.C. <i>et al.</i> (2011) Cellular Integration and Vascularisation Promoted by a Resorbable, Particulate-Leached, Cross-Linked Poly(ε-caprolactone) Scaffold. <a href="#">Macromol Biosci. 11: 618-27.</a></li> <li>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. <a href="#">Genetics. 181: 165-75.</a></li> <li>Stybayeva, G. <i>et al.</i> (2010) Lensfree holographic imaging of antibody microarrays for high-throughput detection of leukocyte numbers and function. <a href="#">Anal Chem. 82: 3736-44.</a></li> <li>Bastock, R. <i>et al.</i> (2003) Strabismus is asymmetrically localised and binds to Prickle and Dishevelled during <i>Drosophila</i> planar polarity patterning. <a href="#">Development. 130: 3007-14.</a></li> <li>Brückner, K. <i>et al.</i> (2000) Glycosyltransferase activity of Fringe modulates Notch-Delta interactions. <a href="#">Nature. 406: 411-5.</a></li> <li>Liversidge, J. <i>et al.</i> (2002) Nitric oxide mediates apoptosis through formation of peroxynitrite and Fas/Fas-ligand interactions in experimental autoimmune uveitis. <a href="#">Am J</a></li> </ol>

[Pathol. 160: 905-16.](#)

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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.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

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

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>

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

## Recommended Negative Controls

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

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