

Datasheet: MCA154A488

Description:	MOUSE ANTI RAT CD2:Alexa Fluor® 488
Specificity:	CD2
Other names:	E-ROSETTE RECEPTOR, LFA-2
Format:	ALEXA FLUOR® 488
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				Neat - 1/10

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 conjugate	ed to Alexa Fluor® 48	8 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nn
	Alexa Fluor®488	495	519
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein A
Buffer Solution	Phosphate buffered sa	aline	
Preservative	0.09% sodium azide (l	NaN <sub>3</sub> )	
Stabilisers	1% bovine serum albu	ımin	
Approx. Protein Concentrations	IgG concentration 0.08	5 mg/ml	

Immunogen	Activated rat T helper cells.				
External Database Links	UniProt: P08921 Related reagents				
	Entrez Gene:  497761 Cd2 Related reagents				
RRID	AB_324294				
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.				
Specificity	<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 (Williams et al. 1987).				
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl				
References	1. Williams, A.F. et al. (1987) Similarities in sequences and cellular expression between				

- 1. Williams, A.F. *et al.* (1987) Similarities in sequences and cellular expression between rat CD2 and CD4 antigens. <u>J Exp Med. 165 (2): 368-80.</u>
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- 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. <u>J</u> 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. <u>Macromol Biosci.</u> 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. <u>Genetics. 181: 165-75.</u>
- 6. Bastock, R. *et al.* (2003) Strabismus is asymmetrically localised and binds to Prickle and Dishevelled during *Drosophila* planar polarity patterning. <u>Development. 130: 3007-14.</u>
- 7. Brückner, K. *et al.* (2000) Glycosyltransferase activity of Fringe modulates Notch-Delta interactions. <u>Nature</u>. 406: 411-5.
- 8. Liversidge, J. *et al.* (2002) Nitric oxide mediates apoptosis through formation of peroxynitrite and Fas/Fas-ligand interactions in experimental autoimmune uveitis. <u>Am J Pathol. 160: 905-16.</u>
- 9. Sarpal, R. *et al.* (2012) Mutational analysis supports a core role for *Drosophila*  $\alpha$ -catenin in adherens junction function. <u>J Cell Sci. 125: 233-45.</u>
- 10. Zhang, H. *et al.* (2011) Basic residues in the T-cell receptor  $\zeta$  cytoplasmic domain mediate membrane association and modulate signaling. <u>Proc Natl Acad Sci U S A. 108:</u> 19323-8.
- 11. Heck, B.W. *et al.* (2012) The transcriptional corepressor SMRTER influences both Notch and ecdysone signaling during *Drosophila* development. <u>Biol Open. 1 (3): 182-96.</u>
  12. Clark, I.B. *et al.* (2011) Fibroblast growth factor signalling controls successive cell

behaviours during mesoderm layer formation in *Drosophila*. <u>Development. 138: 2705-15.</u>

13. Domanitskaya, E. and Schüpbach, T. (2012) CoREST acts as a positive regulator of Notch signaling in the follicle cells of *Drosophila melanogaster*. <u>J Cell Sci. 125: 399-410.</u>

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. <u>Methods. 87: 64-74.</u>

15. Zecca, M. & Struhl, G. (2021) A unified mechanism for the control of *Drosophila*. wing growth by the morphogens Decapentaplegic and Wingless. <u>PLoS Biol. 19 (3): e3001111.</u>

#### **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

### **Acknowledgements**

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# Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA154A488">https://www.bio-rad-antibodies.com/SDS/MCA154A488</a> 10041

## Regulatory

For research purposes only

# **Related Products**

## **Recommended Negative Controls**

MOUSE IgG2a NEGATIVE CONTROL: Alexa Fluor® 488 (MCA1210A488)

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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 'M409968:221021'

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