

## Datasheet: MCA1334A488

Description:	MOUSE ANTI RAT CD31:Alexa Fluor® 488
Specificity:	CD31
Other names:	PECAM-1
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	TLD-3A12
lsotype:	lgG1
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 <u>www.bio-rad-antibodies.com/protocols</u> .							
		Yes No	Not Determined	Suggested Dilution				
	Flow Cytometry	-		Neat - 1/10				
	Functional Assays (1)							
	Where this product ha	as not been tested	for use in a particular tec	hnique 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. (1) <b>Bio-Rad recommend the use of <u>MCA1334EL</u> for use in functional studies</b>							
Target Species	Rat							
Species Cross Reactivity	Reacts with: Rhesus Monkey, Pig <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.							
Product Form	Purified IgG conjugated to Alexa Fluor® 488 - liquid							
Max Ex/Em	Fluorophore	Excitation Max (	m) Emission Max (nm)					
	Alexa Fluor®488	495	519					
Preparation	Purified IgG prepared supernatant	l by affinity chroma	tography on Protein A fro	m tissue culture				

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Activated, Lewis rat derived microglial cells.
External Database Links	UniProt:         Q3SWT0       Related reagents         Entrez Gene:         29583       Pecam1         Related reagents
Synonyms	Pecam
RRID	AB_566716
Fusion Partners	Spleen cells from immunized BALB/c mouse were fused with cells of the mouse SP2 myeloma cell line.
Specificity	<b>Mouse anti Rat CD31 antibody, clone TLD-3A12</b> recognizes rat PECAM-1 (CD31), a 661 amino acid type 1 transmembrane protein expressed primarily on endothelial cells, platelets and leucocytes.
	Clone TLD-3A12 has been shown to partially block the proliferative response of antigen- specific CD4+ T cells to antigen-presenting cells and relevant antigen ( <u>Stevenson, K.S. <i>et</i></u> <u><i>al</i>.2009</u> ).
	Mouse anti Rat CD31 antibody, clone TLD-3A12 is suitable for use in IHC on formalin-fixed paraffin-embedded sections pre-treated with 0.2M boric acid, pH7.0. ( <u>Wilson et al. 2007</u> ). Mouse anti Rat CD31, clone TLD-3A12 has been shown to be cross-reactive with endothelial cells derived from rhesus macaque ( <u>Maclean et al. 2001</u> )
Flow Cytometry	Use 10µl of the suggested working dilution to label $10^6$ cells in $100µl$
References	<ol> <li>Williams, K.C. <i>et al.</i> (1996) PECAM-1 (CD31) expression in the central nervous system and its role in experimental allergic encephalomyelitis in the rat. <u>J Neurosci Res. 45 (6)</u>: <u>747-57.</u></li> <li>Graham, M.J. <i>et al.</i> (1998) <i>In vivo</i> distribution and metabolism of a phosphorothioate oligonucleotide within rat liver after intravenous administration. <u>J Pharmacol Exp Ther.</u> <u>286: 447-58.</u></li> <li>MacLean, A.G. <i>et al.</i> (2001) Rhesus macaque brain microvessel endothelial cells behave in a manner phenotypically distinct from umbilical vein endothelial cells. <u>J</u> <u>Neuroimmunol. 118: 223-32.</u></li> </ol>

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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	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1334A488 10041
Regulatory	For research purposes only

# Related Products

### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 488 (MCA1209A488)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M437932:250320'

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