

Datasheet: MCA2388A700

### **BATCH NUMBER 1611**

Description:	RAT ANTI MOUSE CD31:Alexa Fluor® 700		
Specificity:	CD31		
Other names:	PECAM-1		
Format:	ALEXA FLUOR® 700		
Product Type:	Monoclonal Antibody		
Clone:	ER-MP12		
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

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  Product Form	Purified IgG conjugate	ed to Alexa Fluor®700	) - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	Alexa Fluor®700	702	723
Preparation	Durified IaC propered	by offinity observatory	ranky an Dratain C
·	supernatant	by affinity chromatogi	rapny on Protein G
•	•		rapny on Protein G
Buffer Solution Preservative	supernatant		rapny on Protein G
Buffer Solution	supernatant  Phosphate buffered s	aline	rapny on Protein G

# Concentrations

Immunogen	BALB/c macrophage precursor cell hybrids					
External Database Links	UniProt:  Q08481 Related reagents  Entrez Gene:  18613 Pecam1 Related reagents					
Synonyms	Pecam, Pecam-1					
Fusion Partners	Cells from immunised rats were fused with the cells of the rat Y3-Ag1.2.3 myeloma cell line					
Specificity	Rat anti Mouse CD31 antibody, clone ER-MP12 recognizes mouse CD31, a 140 kDa cell surface glycoprotein that is expressed at high levels on endothelial cells, platelets and most leukocyte subpopulations.					
	CD31 is also expressed on a major population of macrophage / dendritic cell precursors in the bone marrow. Studies show that clone ER-MP12 can be used in conjunction with clone ER-MP20 (MCA2389GA) in two colour flow cytometric analysis, to identify different stages of myeloid progenitor cells in mouse bone marrow (de Bruijn et al. 1998).					
Flow Cytometry	Use10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul					
References	<ol> <li>Leenen, P.J. <i>et al.</i> (1990) Murine macrophage precursor characterization. II. Monoclonal antibodies against macrophage precursor antigens. <u>Eur J Immunol. 20 (1): 27-34.</u></li> <li>Wynn, A.A. <i>et al.</i> (2001) Role of granulocyte/macrophage colony-stimulating factor in zymocel-induced hepatic granuloma formation. <u>Am J Pathol. 158 (1): 131-45.</u></li> <li>de Bruijn, M.F. <i>et al.</i> (1998) Bone marrow cellular composition in Listeria monocytogenes infected mice detected using ER-MP12 and ER-MP20 antibodies: a flow cytometric alternative to differential counting. <u>J Immunol Methods. 217 (1-2): 27-39.</u></li> <li>Revermann, M. <i>et al.</i> (2010) Soluble epoxide hydrolase deficiency attenuates neointima formation in the femoral cuff model of hyperlipidemic mice. <u>Arterioscler Thromb Vasc Biol.</u> 30: 909-14.</li> </ol>					
	<ol> <li>Thorp, E. et al. (2011) A reporter for tracking the UPR in vivo reveals patterns of temporal and cellular stress during atherosclerotic progression. J Lipid Res. 52 (5): 1033-8.</li> <li>Thum, T. et al. (2011) Impairment of endothelial progenitor cell function and vascularization capacity by aldosterone in mice and humans. Eur Heart J. 32: 1275-86.</li> <li>Ross, E.A. et al. (2011) CD31 Is Required on CD4+ T Cells To Promote T Cell Survival during Salmonella Infection. J Immunol. 187: 1553-65.</li> <li>Geutskens, S.B. et al. (2005) Macrophages in the murine pancreas and their involvement in fetal endocrine development in vitro. J Leukoc Biol. 78: 845-52.</li> <li>Schledzewski, K. et al. (2011) Deficiency of liver sinusoidal scavenger receptors</li> </ol>					

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#### **Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

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

#### 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/MCA2388A700">https://www.bio-rad-antibodies.com/SDS/MCA2388A700</a> 10041

# **Related Products**

# **Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 700 (MCA1212A700)

# **Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

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America Fax: +1 919 878 3751

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