Datasheet: MCA2388A647

BATCH NUMBER 150135

Description:	RAT ANTI MOUSE CD31:Alexa Fluor® 647
Specificity:	CD31
Other names:	PECAM-1
Format:	ALEXA FLUOR® 647
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 www.bio-rad-antibodies.com/protocols.

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

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.

Target Species

Mouse

Product Form

Purified IgG conjugated to Alexa Fluor®647- liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein

IgG concentration 0.05 mg/ml

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
RRID	AB_1604768
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 10^6 cells in 100ul.
References	1. Leenen, P.J. *et al.* (1990) Murine macrophage precursor characterization. II. Monoclonal antibodies against macrophage precursor antigens. Eur J Immunol. 20 (1): 27-34. 2. Wynn, A.A. *et al.* (2001) Role of granulocyte/macrophage colony-stimulating factor in zymocel-induced hepatic granuloma formation. Am J Pathol. 158 (1): 131-45. 3. de Bruijn, M.F. *et al.* (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. J Immunol Methods. 217 (1-2): 27-39. 4. Revermann, M. *et al.* (2010) Soluble epoxide hydrolase deficiency attenuates neointima formation in the femoral cuff model of hyperlipidemic mice. Arterioscler Thromb Vasc Biol. 30: 909-14. 5. 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. 6. 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. 7. 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. 8. 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.

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diet-induced obese mice. Proc Natl Acad Sci U S A. 109 (20): 7622-9.
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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

Health And Safety Information

Material Safety Datasheet documentation #10041 available at:
https://www.bio-rad-antibodies.com/SDS/MCA2388A647

	10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 (MCA1212A647)

Recommended Useful Reagents

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

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

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