

## Datasheet: MCA1825PE BATCH NUMBER INN1711

Description:	RAT ANTI MOUSE CD34:RPE
Specificity:	CD34
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MEC14.7
lsotype:	lgG2a
Quantity:	100 TESTS

# **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 - 1/5	
	Where this antibody h			•	•	
	necessarily exclude its a guide only. It is reco system using appropri	mmended that	the user ti	itrates the antibody	g dilutions are given as for use in their own	
Target Species	Mouse					
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - Iyophilized					
Reconstitution	Reconstitute with 1.0 ml distilled water					
Max Ex/Em	Fluorophore	Excitation Max	k (nm) Er	mission Max (nm)		
	RPE 488nm laser	496		578		
Preparation	Purified IgG prepared supernatant	by affinity chro	matograpł	hy on Protein G fron	n tissue culture	
Buffer Solution	Phosphate buffered sa	aline				
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum 5% Sucrose	Albumin				

Immunogen	T-end.1, a pMT transformed endothelial cell line.
External Database Links	UniProt: Q64314 Related reagents Entrez Gene: <u>12490</u> Cd34 <u>Related reagents</u>
RRID	AB_323252
Specificity	<b>Rat anti Mouse CD34 antibody, clone MEC14.7</b> recognizes the murine CD34 cell surface antigen, expressed by endothelial cells and by hematopoietic stem cells. Rat anti Mouse CD34 antibody, clone MEC14.7 recognizes a neuraminidase sensitive epitope. As in the human system, CD34 antibodies in the mouse demonstrate slightly different staining patterns depending on their fine specificity. Rat anti Mouse CD34 antibody, clone MEC14.7 appears to recognize a subset of the stem cell population recognized by clone RAM34, and it is thought that this is due to differences in the epitope recognized by the two antibodies.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR ( <u>BUF041A/B</u> ).
References	<ol> <li>Winding, B. <i>et al.</i> (2002) Synthetic matrix metalloproteinase inhibitors inhibit growth of established breast cancer osteolytic lesions and prolong survival in mice. <u>Clin Cancer Res. 8 (6): 1932-9.</u></li> <li>Nguyen, L. <i>et al.</i> (2012) Spatial morphological and molecular differences within solid tumors may contribute to the failure of vascular disruptive agent treatments. <u>BMC Cancer. 12: 522.</u></li> <li>Morison, N.B. <i>et al.</i> (2007) The long-term actions of etonogestrel and levonorgestrel on decidualized and non-decidualized endometrium in a mouse model mimic some effects of progestogen-only contraceptives in women. <u>Reproduction. 133: 309-21.</u></li> <li>Chen, L. <i>et al.</i> (2010) Roles of tetrahydrobiopterin in promoting tumor angiogenesis. <u>Am J Pathol. 177: 2671-80.</u></li> <li>Ager, E.I. <i>et al.</i> (2011) Targeting the angiotensin II type 2 receptor (AT2R) in colorectal liver metastases. <u>Cancer Cell Int. 10: 19</u></li> <li>Chabot, S. <i>et al.</i> (2011) A novel antiangiogenic and vascular normalization therapy targeted against human CD160 receptor. J <u>Exp Med. 208: 973-86.</u></li> <li>Chen, J. <i>et al.</i> (2012) Transfusion of CXCR4-primed endothelial progenitor cells reduces cerebral ischemic damage and promotes repair in db/db diabetic mice. <u>PLoS One. 7 (11): e50105.</u></li> <li>Ouji, Y. &amp; Yoshikawa, M. (2016) Maintenance of Skin Epithelial Stem Cells by Wnt-3a In Vitro. <u>Methods Mol Biol. 1516: 279-88.</u></li> </ol>

	10. Nguyen, L. <i>et al.</i> (2016) Vascular disruptive agent OXi4503 and anti-angiogenic agent Sunitinib combination treatment prolong survival of mice with CRC liver metastasis. <u>BMC</u> Cancer. 16 (1): 533.
	11. Vávrová, J. <i>et al.</i> (2012) Irradiated stem cells and ageing of the haematopoietic system. <u>Radiat Environ Biophys. 51 (2): 205-13.</u>
	12. DaCosta, P.L.N. <i>et al.</i> (2018) The kallikrein-Kinin system modulates the progression of colorectal liver metastases in a mouse model. <u>BMC Cancer. 18 (1): 382.</u>
	13. Danielyan, L. <i>et al.</i> . (2020) Cell motility and migration as determinants of stem cell efficacy <u>EBioMedicine</u> . 60:102989.
	14. Rackham, C.L. <i>et al.</i> (2013) Maintenance of islet morphology is beneficial for transplantation outcome in diabetic mice. <u>PLoS One. 8 (2): e57844.</u>
	15. Fruchon, S. <i>et al.</i> (2012) Involvement of the Syk-mTOR pathway in follicular lymphoma cell invasion and angiogenesis. <u>Leukemia. 26 (4): 795-805.</u>
	16. Zhu, C. <i>et al.</i> (2020) Antinociceptive effect of intrathecal injection of miR-9-5p modified mouse bone marrow mesenchymal stem cells on a mouse model of bone cancer pain. J
	Neuroinflammation. 17 (1): 85.
	17. Ouji, Y. <i>et al.</i> (2022) Impaired differentiation potential of CD34-positive cells derived from mouse hair follicles after long-term culture. <u>Sci Rep. 12 (1): 11011.</u>
Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.
	DO NOT FREEZE.
	This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1825PE 20487
Regulatory	For research purposes only
Related Produc	nts

### Related Products

### **Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL:RPE (MCA1212PE)

#### **Recommended Useful Reagents**

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

North & South	Tel: +1 800 265 7376	Worldwide
America	Fax: +1 919 878 3751	
	Email: antibody_sales_us@bio-rad.com	

Tel: +44 (0)1865 852 700 **Europe** Fax: +44 (0)1865 852 739 Email: antibody\_sales\_uk@bio-rad.com Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 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

#### Printed on 18 Jan 2024

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