

Datasheet: MCA1825PE

Description:	RAT ANTI MOUSE CD34:RPE
Specificity:	CD34
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MEC14.7
Isotype:	IgG2a
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat - 1/5

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 R. Phycoerythrin (RPE) - lyophilized						
Reconstitution	Reconstitute with 1.0 ml distilled water						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide						
Stabilisers	1% Bovine Serum Albumin 5% Sucrose						
Immunogen	T-end.1, a pMT transformed endothelial cell line.						

External Database Links

UniProt:
[Q64314](#) [Related reagents](#)

Entrez Gene:

RRID AB_323252

Specificity **Rat anti Mouse CD34 antibody, clone MEC14.7** recognizes the murine CD34 cell surface antigen, which is expressed by endothelial cells and by haematopoietic stem cells. This antibody 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 10⁶ 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 ([BUF041A/B](#)).

- References**
1. Winding, B. *et al.* (2002) Synthetic matrix metalloproteinase inhibitors inhibit growth of established breast cancer osteolytic lesions and prolong survival in mice. [Clin Cancer Res. 8 \(6\): 1932-9.](#)
 2. Nguyen, L. *et al.* (2012) Spatial morphological and molecular differences within solid tumors may contribute to the failure of vascular disruptive agent treatments. [BMC Cancer. 12: 522.](#)
 3. Morison, N.B. *et al.* (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. [Reproduction. 133: 309-21.](#)
 4. Chen, L. *et al.* (2010) Roles of tetrahydrobiopterin in promoting tumor angiogenesis. [Am J Pathol. 177: 2671-80.](#)
 5. Ager, E.I. *et al.* (2010) Targeting the angiotensin II type 2 receptor (AT2R) in colorectal liver metastases. [Cancer Cell Int. 10: 19](#)
 6. Chabot, S. *et al.* (2011) A novel antiangiogenic and vascular normalization therapy targeted against human CD160 receptor. [J Exp Med. 208: 973-86.](#)
 7. Chen, J. *et al.* (2011) Circulating endothelial progenitor cells and cellular membrane microparticles in db/db diabetic mouse: possible implications in cerebral ischemic damage. [Am J Physiol Endocrinol Metab. 2011 Jul;301\(1\):E62-71.](#)
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 9. Oujj, Y. & Yoshikawa, M. (2016) Maintenance of Skin Epithelial Stem Cells by Wnt-3a In Vitro. [Methods Mol Biol. 1516: 279-88.](#)
 10. Nguyen, L. *et al.* (2016) Vascular disruptive agent OXi4503 and anti-angiogenic agent Sunitinib combination treatment prolong survival of mice with CRC liver metastasis. [BMC Cancer. 16 \(1\): 533.](#)
 11. Vávrová, J. *et al.* (2012) Irradiated stem cells and ageing of the haematopoietic system. [Radiat Environ Biophys. 51 \(2\): 205-13.](#)
 12. DaCosta, P.L.N. *et al.* (2018) The kallikrein-Kinin system modulates the progression of colorectal liver metastases in a mouse model. [BMC Cancer. 18 \(1\): 382.](#)
 13. Danielyan, L. *et al.* (2020) Cell motility and migration as determinants of stem cell efficacy [EBioMedicine. 60:102989.](#)
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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
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Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

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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