

Datasheet: MCA1825F

BATCH NUMBER 150868

Description:	RAT ANTI MOUSE CD34:FITC
Specificity:	CD34
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEC14.7
Isotype:	IgG2a
Quantity:	0.1 mg

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

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
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>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
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						
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml						

Immunogen T-end.1, a pMT transformed endothelial cell line.

External Database

Links

UniProt:

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

Entrez Gene:

[12490](#) Cd34 [Related reagents](#)

RRID

AB_323171

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.](#)
8. Chen, J. *et al.* (2012) Transfusion of CXCR4-primed endothelial progenitor cells reduces cerebral ischemic damage and promotes repair in db/db diabetic mice. [PLoS One. 7 \(11\): e50105.](#)
9. O uji, 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.](#)

14. Rackham, C.L. *et al.* (2013) Maintenance of islet morphology is beneficial for transplantation outcome in diabetic mice. [PLoS One. 8 \(2\): e57844.](#)

15. Fruchon, S. *et al.* (2012) Involvement of the Syk-mTOR pathway in follicular lymphoma cell invasion and angiogenesis. [Leukemia. 26 \(4\): 795-805.](#)

Storage

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

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. 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

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1825F>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M365764:200529'

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