Datasheet: MCA1825T

BATCH NUMBER 154562

Description:	RAT ANTI MOUSE CD34
Specificity:	CD34
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MEC14.7
Isotype:	IgG2a
Quantity:	25 µg

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	▪			1/10 - 1/20
Immunohistology - Frozen			▪	
Immunohistology - Paraffin	▪			1/20 - 1/200
ELISA			▪	
Immunoprecipitation	▪			2ug/ml - 10ug/ml
Western Blotting			▪	

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 - liquid
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
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1.0 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_1101948
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 10^6 cells in 100ul.
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. Ouji, 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.
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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. 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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1825T 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550, DyLight®650, DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL (MCA1212)

Recommended Useful Reagents

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)

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

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