

Datasheet: MCA547PET

Description:	MOUSE ANTI HUMAN CD34:RPE
Specificity:	CD34 CLASS II
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	QBEND/10
Isotype:	IgG1
Quantity:	25 TESTS/0.25ml

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 his/her own system using appropriate negative/positive controls.

Target Species	Human		
Species Cross Reactivity	Reacts with: Cynomolgus monkey, Rhesus Monkey Does not react with: Bovine, Sheep, Rat, Dog N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 0.25 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
Immunogen	Human endothelial cell membrane vesicles.
External Database Links	<p>UniProt: P28906 Related reagents</p> <p>Entrez Gene: 947 CD34 Related reagents</p>
RRID	AB_2062999
Fusion Partners	Spleen cells from immunized NZB mice were fused with cells of the mouse NSO myeloma cell line.
Specificity	<p>Mouse anti Human CD34 antibody, clone QBEND/10 recognizes the human CD34 antigen, also known as Hematopoietic progenitor cell antigen CD34. Human CD34 is 385 amino acid polypeptide containing a 31 residue signal peptide, cleaved to yield the ~110kDa mature form of CD34, a sialomucin single pass transmembrane glycoprotein. CD34 is expressed by stem cells (Kaufman <i>et al.</i> 2001) and small vessel endothelium (Ramani <i>et al.</i> 1990)</p> <p>Human CD34 exists as two isoforms, the full length form described here and a truncated isoform lacking the carboxy-terminal of the intracellular domain and containing some alternative sequence in the remaining intracellular region. Antibody binding epitopes on human CD34 have been classified according to their resistance to enzymatic degradation and grouped together using this and competitive binding assays (Lanza <i>et al.</i> 1999). Mouse anti Human CD34 antibody, clone QBEND/10 has been classified as binding to the class II epitope, resistant to neuraminidase treatment but sensitive to both glycoprotease and chymopapain digestion. Mouse anti Human CD34 antibody, clone QBEND/10 binds to a different epitope to Mouse anti Human CD34, clone 581 which binds to the class III epitope resistant to all three enzymatic treatments (Nishio <i>et al.</i> 1996 In Leukocyte Typing VI). Clone QBEND 10 is expected to bind to both isoforms of human CD34 as it's binding epitope has been mapped to the extracellular domain between amino acids 43 and 49 by peptide microarray analysis (Jones <i>et al.</i> 1996, in Leukocyte Typing VI).</p> <p>Mouse anti Human CD34 antibody, clone QBEND/10 has been successfully exploited for the detection of CD34 in brain capillaries of Alzheimer's patients (Kalaria <i>et al.</i> 1992) and in acute lymphoblastic leukemia cells (Sutherland <i>et al.</i> 1992) by western blotting.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1 x 10 ⁶ cells in 100ul.
References	1. Fina, L. <i>et al.</i> (1990) Expression of the CD34 gene in vascular endothelial cells. Blood .

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Further Reading 1. Gorr, T.A. *et al.* (2011) Old proteins - new locations: myoglobin, haemoglobin, neuroglobin and cytoglobin in solid tumours and cancer cells. [Acta Physiol \(Oxf\). 202: 563-581.](#)

Storage Prior to reconstitution store at +4°C.
After 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/MCA547PET>
20487

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

North & South Tel: +1 800 265 7376

America 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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