

Datasheet: MCA1738PET

Description:	MOUSE ANTI HUMAN CD31:RPE
Specificity:	CD31
Other names:	PECAM-1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	WM59
Isotype:	IgG1
Quantity:	25 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

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Cynomolgus monkey, Rhesus Monkey
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 0.25ml 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 G from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin 5% sucrose
External Database Links	<p>UniProt: P16284 Related reagents</p> <p>Entrez Gene: 5175 PECAM1 Related reagents</p>
RRID	AB_1101909
Specificity	<p>Mouse anti Human CD31 monoclonal antibody, clone WM59 recognizes the human CD31 antigen, a ~130 kDa single pass type I transmembrane glycoprotein bearing six C2 immunoglobulin domains. CD31 is expressed by all continuous endothelia including arteries, veins and non-sinusoidal capillaries, platelets, granulocytes and some lymphocytes. CD31 is not expressed by discontinuous endothelia such as hepatic sinusoids and splenic red pulp (Muller et al. 1989). CD31 is also known as PECAM-1.</p> <p>The binding epitope for mouse anti human CD31, clone WM59 has been mapped to the Ig-like domain 2 (Fawcett et al. 1995).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells or 100µl whole blood
References	<ol style="list-style-type: none"> Paul, G. <i>et al.</i> (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. PLoS One. 7: e35577. Urquhart, P. <i>et al.</i> (2007) Carbon monoxide-releasing molecules modulate leukocyte-endothelial interactions under flow. J Pharmacol Exp Ther. 321 (2): 656-62. Reedquist, K.A. <i>et al.</i> (2000) The small GTPase, Rap1, mediates CD31-induced integrin adhesion. J Cell Biol. 148: 1151-8. Vernon-Wilson, E.F. <i>et al.</i> (2007) CD31 delays phagocyte membrane repolarization to promote efficient binding of apoptotic cells. J Leukoc Biol. 82: 1278-88. Hilbe W <i>et al.</i> (2003) Immunohistochemical typing of non-small cell lung cancer on cryostat sections: correlation with clinical parameters and prognosis. J Clin Pathol. 56 (10): 736-41. Stein, A. <i>et al.</i> (2010) Local erythropoietin and endothelial progenitor cells improve regional cardiac function in acute myocardial infarction. BMC Cardiovasc Disord. Sep; 10:43. Woollard, K.J. <i>et al.</i> (2002) Direct modulatory effect of C-reactive protein on primary human monocyte adhesion to human endothelial cells. Clin Exp Immunol. 130: 256-62. Theberge, A.B. <i>et al.</i> (2015) Microfluidic multiculture assay to analyze biomolecular signaling in angiogenesis. Anal Chem. 87 (6): 3239-46. Hilbe W <i>et al.</i> (2004) CD133 positive endothelial progenitor cells contribute to the tumour vasculature in non-small cell lung cancer. J Clin Pathol. 57 (9): 965-9. Palakkan, A.A. <i>et al.</i> (2015) Polarisation and functional characterisation of hepatocytes

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Further Reading

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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/MCA1738PET>
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 \(BUF070B\)](#)

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