

Datasheet: MCA1738F BATCH NUMBER 148645

Description:	MOUSE ANTI HUMAN CD31:FIT		
Specificity:	CD31		
Other names:	PECAM-1		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Clone:	WM59		
lsotype:	lgG1		
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 Determin	ed Suggested Dilution				
	Flow Cytometry	•		Neat - 1/2				
	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							
	a guide only. It is recommended that the user titrates the antibody for use in their own							
	system using appropri-	ate negative/posit	ve controls.					
Target Species	Human							
Species Cross	Reacts with: Cynomolgus monkey, Rhesus Monkey							
Reactivity	N.B. Antibody reactivity and working conditions may vary between species. Cross							
	reactivity is derived from testing within our laboratories, peer-reviewed publications							
	personal communications from the originators. Please refer to references indicated for							
	further information.							
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid							
Max Ex/Em	Fluorophore	Excitation Max (n	m) Emission Max (nm)				
	FITC	490	525					
Bronaration	Durifie d InO many state			A francis tion and the sec				
Freparation								
	supernatant							

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml
External Database Links	UniProt: <u>P16284</u> <u>Related reagents</u>
	Entrez Gene: 5175 PECAM1 Related reagents
RRID	AB_322848
Specificity	Mouse anti Human CD31 monoclonal antibody, clone WM59 recognizes the human CD31 antigen, a ~130 kDa single pass type I transmembrane glycoprotein bearing six <u>C2</u> 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 <i>et al.</i> 1989).CD31 is also known as PECAM-1. The binding epitope for mouse anti human CD31, clone WM59 has been mapped to the lg-like domain 2 (Fawcett <i>et al.</i> 1995).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	 Paul, G. <i>et al.</i> (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. <u>PLoS One. 7: e35577.</u> Stockinger, H. <i>et al.</i> (1990) Molecular characterization and functional analysis of the leukocyte surface protein CD31. <u>J Immunol. 145 (11): 3889-97.</u> DeLisser, H.M. <i>et al.</i> (1994) Molecular and functional aspects of PECAM-1/CD31. <u>Immunol Today. 15 (10): 490-5.</u> Urquhart, P. <i>et al.</i> (2007) Carbon monoxide-releasing molecules modulate leukocyte-endothelial interactions under flow. <u>J Pharmacol Exp Ther. 321 (2): 656-62.</u> Reedquist, K.A. <i>et al.</i> (2000) The small GTPase, Rap1, mediates CD31-induced integrin adhesion. <u>J Cell Biol. 148: 1151-8.</u> Vernon-Wilson, E.F. <i>et al.</i> (2007) CD31 delays phagocyte membrane repolarization to promote efficient binding of apoptotic cells. <u>J Leukoc Biol. 82: 1278-88.</u> Johnston, A. <i>et al.</i> (2005) The anti-inflammatory action of methotrexate is not mediated by lymphocyte apoptosis, but by the suppression of activation and adhesion molecules. <u>Clin Immunol. 114: 154-63.</u> Hilbe W <i>et al.</i> (2003) Immunohistochemical typing of non-small cell lung cancer on cryostat sections: correlation with clinical parameters and prognosis. <u>J Clin Pathol. 56 (10): 736-41.</u> Stein, A. <i>et al.</i> (2010) Local erythropoietin and endothelial progenitor cells improve

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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.

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Regulatory For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	/orldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.co	om	Email: antibody_sales_uk@bio-rad	.com	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M365643:200529'

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