

# Datasheet: MCA1746F BATCH NUMBER 164909

Description:	MOUSE ANTI PIG CD31:FITC		
Specificity:	CD31		
Other names:	PECAM-1		
Format:	FITC		
Product Type:	Monoclonal Antibody		
Clone:	LCI-4		
Isotype:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			Neat - 1/10
Immunofluorescence	-			

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	Pig
Species Cross Reactivity	Reacts with: Human Does not react with:Mouse

**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 firstly as informs at less.

further information.

Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) -				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		
	FITC	490	525		

# supernatant

Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin			
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml			
Immunogen	Porcine CD31/human IgGFc fusion protein.			
External Database Links	UniProt:  Q95242 Related reagents			
	Entrez Gene:  396941 PECAM1 Related reagents			
RRID	AB_323951			
Specificity	<b>Mouse anti Pig CD31, clone LCI-4</b> recognizes porcine CD31, also known as Platelet endothelial cell adhesion molecule (PECAM-1). CD31 is constitutively expressed by platelets, monocytes and some lymphocytes, it is expressed by endothelial cells at a level, an order of magnitude greater that of other cell types ( <u>Fawcwett et al.1995</u> ). The extracellular region contains six Ig-like domains. Mouse anti Pig CD31, clone LCI-4 is cross reactive with human CD31 and binds to the 5 <sup>th</sup> extracellular Ig domain, proximal to the transmembrane region as demonstrated by human CD31 domain deletion mutants ( <u>Nasu et al.1999</u> ).			
	Mouse anti Pig CD31, clone LCI-4 immunoprecipitates a protein of ~130 kDa from lysates of porcine aortic endothelial cells and is strongly expressed at cell junctions ( <u>Nasu et al.</u> 1999).			
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells or 100µl whole blood			
References	<ol> <li>Nasu, K. et al. (1999) Alpha-galactosyl-mediated activation of porcine endothelial cells: studies on CD31 and VE-cadherin in adhesion and signaling. Transplantation. 68: 861-7.</li> <li>Evans, P.C. et al. (2001) Signaling through CD31 protects endothelial cells from apoptosis. Transplantation. 71 (3): 343-4.</li> <li>Campos, E. et al. (2004) In vitro effect of classical swine fever virus on a porcine aortic endothelial cell line Vet Res. 35: 625-33.</li> <li>Waksman, R. et al. (2006) Intracoronary photodynamic therapy reduces neointimal growth without suppressing re-endothelialisation in a porcine model. Heart. 92: 1138-44.</li> <li>Iohara, K. et al. (2008) A novel stem cell source for vasculogenesis in ischemia: subfraction of side population cells from dental pulp. Stem Cells. 26 (9): 2408-18.</li> </ol>			

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#### **Further Reading**

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- 2. Rayat, G.R. *et al.* (2016) First update of the International Xenotransplantation Association consensus statement on conditions for undertaking clinical trials of porcine islet products in type 1 diabetes Chapter 3: Porcine islet product manufacturing and release testing criteria. Xenotransplantation. 23 (1): 38-45.

#### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

# Guarantee

12 months from date of despatch

# Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1746F">https://www.bio-rad-antibodies.com/SDS/MCA1746F</a> 10041

# **Related Products**

# **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

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 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
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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 'M411319:221102'

#### Printed on 18 Jan 2024

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