BIO-RAD

Datasheet: MCA1746B

BATCH NUMBER 166711

Description:	MOUSE ANTI PIG CD31:Biotin
Specificity:	CD31
Other names:	PECAM-1
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	LCI-4
Isotype:	IgG1
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 Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/200

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 further information.

Product Form

Purified IgG conjugated to biotin - liquid

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 (NaN_3) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Porcine CD31/human IgGFc fusion protein.
External Database Links	**UniProt:** Q95242 Related reagents **Entrez Gene:** 396941 PECAM1 Related reagents
RRID	AB_1604771
Specificity	**Mouse anti Pig CD31, clone LCI-4** 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 (Fawcwett *et al.*1995). 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 5th extracellular Ig domain, proximal to the transmembrane region as demonstrated by human CD31 domain deletion mutants (Nasu *et al.*1999). 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 (Nasu *et al.* 1999).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells or 100µl whole blood
References	1. 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. 2. Evans, P.C. *et al.* (2001) Signaling through CD31 protects endothelial cells from apoptosis. Transplantation. 71 (3): 343-4. 3. 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. 4. Waksman, R. *et al.* (2006) Intracoronary photodynamic therapy reduces neointimal growth without suppressing re-endothelialisation in a porcine model. Heart. 92: 1138-44. 5. 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. 6. Katchman, H. *et al.* (2008) Embryonic porcine liver as a source for transplantation: advantage of intact liver implants over isolated hepatoblasts in overcoming homeostatic inhibition by the quiescent host liver. Stem Cells. 26: 1347-55. 7. Tchorsh-Yutsis, D. *et al.* (2009) Pig embryonic pancreatic tissue as a source for transplantation in diabetes: transient treatment with anti-LFA1, anti-CD48, and FTY720 enables long-term graft maintenance in mice with only mild ongoing immunosuppression.

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Further Reading

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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:
https://www.bio-rad-antibodies.com/SDS/MCA1746B
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Biotin (MCA928B)

North & South America	Tel: +1 800 265 7376 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

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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