

Datasheet: MCA1746B

| Description: | MOUSE ANTI PIG CD31:Biotin | | | |
|---------------|----------------------------|--|--|--|
| Specificity: | CD31 | | | |
| Other names: | PECAM-1 | | | |
| Format: | Biotin | | | |
| Product Type: | Monoclonal Antibody | | | |
| Clone: | LCI-4 | | | |
| Isotype: | lgG1 | | | |
| Quantity: | 0.1 mg | | | |
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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 <u>www.bio-rad-antibodies.com/protocols</u> . | | | | | | | |
|-----------------------------|--|-----|----|----------------|--------------------|--|--|--|
| | | 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 | 0.09% sodium azide (NaN ₃) | | | | | | | |

| Stabilisers | 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 <i>et al.</i> 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 5 th extracellular Ig domain, proximal to the transmembrane region as demonstrated by human CD31 domain deletion mutants (Nasu <i>et al.</i> 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 <i>et al.</i> 1999). | | |
| Flow Cytometry | Use 10µl of the suggested working dilution to label 10^6 cells or $100µl$ whole blood | | |
| References | Nasu, K. <i>et al.</i> (1999) Alpha-galactosyl-mediated activation of porcine endothelial cells: studies on CD31 and VE-cadherin in adhesion and signaling. <u>Transplantation. 68: 861-7.</u> Evans, P.C. <i>et al.</i> (2001) Signaling through CD31 protects endothelial cells from apoptosis. <u>Transplantation. 71 (3): 343-4.</u> Campos, E. <i>et al.</i> (2004) <i>In vitro</i> effect of classical swine fever virus on a porcine aortic endothelial cell line <u>Vet Res. 35: 625-33.</u> Waksman, R. <i>et al.</i> (2006) Intracoronary photodynamic therapy reduces neointimal | | |

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18. Balaoing, L.R. *et al.* (2015) Laminin Peptide-Immobilized Hydrogels Modulate Valve Endothelial Cell Hemostatic Regulation. <u>PLoS One. 10 (6): e0130749.</u>

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collagen-chitosan scaffold with a flow-through vascular pedicle. <u>Biomaterials. 73: 198-213.</u> 21. Puperi, D.S. *et al.* (2015) 3-Dimensional spatially organized PEG-based hydrogels for an aortic valve co-culture model. <u>Biomaterials. 67: 354-64.</u>

22. Ramm, R. *et al.* (2016) Decellularized GGTA1-KO pig heart valves do not bind preformed human xenoantibodies. <u>Basic Res Cardiol. 111 (4): 39.</u>

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| Further Reading Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <u>Vet Res. 39: 54.</u> |
| StorageThis 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 |
| Guarantee 12 months from date of despatch |
| Health And Safety Material Safety Datasheet documentation #10041 available at: Information 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 | Tel: +1 800 265 7376 | Worldwide | 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.com | 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 'M411320:221102'

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