

Datasheet: MCA1746PET

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|----------------------|-------------------------|
| Description: | MOUSE ANTI PIG CD31:RPE |
| Specificity: | CD31 |
| Other names: | PECAM-1 |
| Format: | RPE |
| Product Type: | Monoclonal Antibody |
| Clone: | LCI-4 |
| 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 antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody 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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 0.25ml distilled water

Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.

| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|-----------|-----------------|---------------------|-------------------|
| | RPE 488nm laser | 496 | 578 |

| | |
|-------------------------------------|---|
| Preparation | Purified IgG prepared by affinity chromatography from tissue culture supernatant |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 5% Sucrose |
| Immunogen | Porcine CD31/human IgGFc fusion protein. |
| External Database Links | <p>UniProt: Q95242 Related reagents</p> <p>Entrez Gene: 396941 PECAM1 Related reagents</p> |
| RRID | AB_1101904 |
| Specificity | <p>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 than that of other cell types (Fawcett <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 5th extracellular Ig domain, proximal to the transmembrane region as demonstrated by human CD31 domain deletion mutant protein binding studies (Nasu <i>et al.</i> 1999).</p> <p>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).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood. |
| References | <ol style="list-style-type: none"> 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. Transplantation. 68: 861-7. Evans, P.C. <i>et al.</i> (2001) Signaling through CD31 protects endothelial cells from apoptosis. Transplantation. 71 (3): 343-4. Gesslein, B. <i>et al.</i> (2010) Mitogen-activated protein kinases in the porcine retinal arteries and neuroretina following retinal ischemia-reperfusion. Mol Vis. 16: 392-407. Gyöngyösi, M. <i>et al.</i> (2010) Differential effect of ischaemic preconditioning on mobilisation and recruitment of haematopoietic and mesenchymal stem cells in porcine myocardial ischaemia-reperfusion. Thromb Haemost. 104 (2): 376-84. Iohara, K. <i>et al.</i> (2008) A novel stem cell source for vasculogenesis in ischemia: subfraction of side population cells from dental pulp. Stem Cells. 26 (9): 2408-18. Campos, E. <i>et al.</i> (2004) <i>In vitro</i> effect of classical swine fever virus on a porcine aortic endothelial cell line Vet Res. 35: 625-33. Takeda, S. <i>et al.</i> (2006) Differential origin for endothelial and mesangial cells after |

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Further Reading 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

Storage 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: 20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

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|----------------------------------|---|------------------|---|---------------|---|
| 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 |
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