

## Datasheet: MCA1746PE

|                      |                         |
|----------------------|-------------------------|
| <b>Description:</b>  | MOUSE ANTI PIG CD31:RPE |
| <b>Specificity:</b>  | CD31                    |
| <b>Other names:</b>  | PECAM-1                 |
| <b>Format:</b>       | RPE                     |
| <b>Product Type:</b> | Monoclonal Antibody     |
| <b>Clone:</b>        | LCI-4                   |
| <b>Isotype:</b>      | IgG1                    |
| <b>Quantity:</b>     | 100 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](http://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.

|                                 |                                                                                                        |                            |                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| <b>Target Species</b>           | Pig                                                                                                    |                            |                          |
| <b>Species Cross Reactivity</b> | Reacts with: Human<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species. |                            |                          |
| <b>Product Form</b>             | Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized                                        |                            |                          |
| <b>Reconstitution</b>           | Reconstitute with 1 ml distilled water                                                                 |                            |                          |
| <b>Max Ex/Em</b>                | <b>Fluorophore</b>                                                                                     | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                 | RPE 488nm laser                                                                                        | 496                        | 578                      |
| <b>Preparation</b>              | Purified IgG prepared by affinity chromatography from tissue culture supernatant                       |                            |                          |
| <b>Buffer Solution</b>          | Phosphate buffered saline                                                                              |                            |                          |
| <b>Preservative Stabilisers</b> | 0.09% Sodium Azide (NaN <sub>3</sub> )                                                                 |                            |                          |
|                                 | 1% Bovine Serum Albumin                                                                                |                            |                          |
|                                 | 5% Sucrose                                                                                             |                            |                          |
| <b>Immunogen</b>                | Porcine CD31/human IgGFc fusion protein.                                                               |                            |                          |
| <b>External Database Links</b>  | <b>UniProt:</b>                                                                                        |                            |                          |

**Entrez Gene:**

[396941](#)   PECAM1   [Related reagents](#)

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**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 than of other cell types ([Fawcett \*et al.\* 1995](#)). The extracellular region contains six Ig-like domains. 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 mutant protein binding studies ([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](#)).

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells or 100ul whole blood.

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**References**

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|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Further Reading</b>               | 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a>                                                                                                                              |
| <b>Storage</b>                       | <p>Store at +4  C.</p> <p>DO NOT FREEZE</p> <p>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.</p> |
| <b>Shelf Life</b>                    | 12 months from date of reconstitution.                                                                                                                                                                                                                |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10075 available at: 10075: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf</a>                                                 |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                                                            |

## Related Products

## Recommended Negative Controls

### MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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'M300815:170106'

**Printed on 05 May 2018**

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