Datasheet: MCA1334PE

Description: MOUSE ANTI RAT CD31:RPE

Specificity: CD31

Other names: PECAM-1

Format: RPE

Product Type: Monoclonal Antibody

Clone: TLD-3A12

Isotype: IgG1

Quantity: 100 TESTS

RRID: AB_808413

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.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional Assays (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

(1) Bio-Rad recommend the use of MCA1334EL for use in functional studies

Target Species
Rat

Species Cross Reactivity
Reacts with: Rhesus Monkey, Pig

N.B. Antibody reactivity and working conditions may vary between species.

Product Form
Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution
Reconstitute with 1 ml distilled water

Max Ex/Em
<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPE 488nm laser</td>
<td>496</td>
<td>578</td>
</tr>
</tbody>
</table>

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
1% Bovine Serum Albumin
5% Sucrose
Immunogen

Activated, Lewis rat derived microglial cells.

External Database Links

UniProt: Q3SWT0

Entrez Gene: 29583 Pecam1

Synonyms

Pecam

Fusion Partners

Spleen cells from immunised BALB/c mouse were fused with cells of the mouse SP2 myeloma cell line.

Specificity

Mouse anti Rat CD31 antibody, clone TLD-3A12 recognizes rat PECAM-1 (CD31), a 661 amino acid type 1 transmembrane protein expressed primarily on endothelial cells, platelets and leucocytes.

Clone TLD-3A12 has been shown to partially block the proliferative response of antigen-specific CD4+ T cells to antigen-presenting cells and relevant antigen (Stevenson, K.S. et al. 2009).

Mouse anti Rat CD31 antibody, clone TLD-3A12 is suitable for use in IHC on formalin-fixed paraffin-embedded sections pre-treated with 0.2M boric acid, pH7.0. (Wilson et al. 2007). Mouse anti Rat CD31, clone TLD-3A12 has been shown to be cross-reactive with endothelial cells derived from rhesus macaque (Maclean et al. 2001).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References


32. Matsugami, H. et al. (2014) VEGF secretion by adipose tissue-derived regenerative cells is impaired under hyperglycemic conditions via glucose transporter activation and ROS increase Biomedical Research. 35 (6): 397-405.


34. Naaijkens BA et al. (2015) Acute myocardial infarction does not affect functional characteristics of adipose-derived stem cells in rats, but reduces the number of stem cells in adipose tissue. Cell


---

**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.

**Shelf Life**

12 months from date of reconstitution.

**Health And Safety Information**


**Regulatory**

For research purposes only

---

**Related Products**

**Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: RPE (MCA1209PE)