Datasheet: MCA1334FB

Description: MOUSE ANTI RAT CD31:FITC

Specificity: CD31

Other names: PECAM-1

Format: FITC

Product Type: Monoclonal Antibody

Clone: TLD-3A12

Isotype: IgG1

Quantity: 0.5 mg

RRID: AB_566721

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>No</td>
<td>Not Determined</td>
<td>1/50 - 1/100</td>
</tr>
<tr>
<td>Functional Assays (1)</td>
<td>No</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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITC</td>
<td>490</td>
<td>525</td>
</tr>
</tbody>
</table>

Preparation: Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution: Phosphate buffered saline

Preservative Stabilisers: 0.09% Sodium Azide, 1% Bovine Serum Albumin

Approx. Protein Concentrations: IgG concentration 0.5 mg/ml
Immunogen
Activated, Lewis rat derived microglial cells.

External Database Links
UniProt: Q3SWT0
Related reagents

Entrez Gene: 29583 Pecam1 Related reagents

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 or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

**Shelf Life**

18 months from date of despatch.

**Health And Safety Information**


**Regulatory**

For research purposes only

**Related Products**

**Recommended Negative Controls**

**MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA1209F)**

© 2019 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)