Datasheet: MCA1334EL

### Product Details

**Description:** MOUSE ANTI RAT CD31:Low Endotoxin

**Specificity:** CD31

**Other names:** PECAM-1

**Format:** Low Endotoxin

**Product Type:** Monoclonal Antibody

**Clone:** TLD-3A12

**Isotype:** IgG1

**Quantity:** 0.5 mg

### 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).

<table>
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<th>Applications</th>
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<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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</thead>
<tbody>
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<td>Flow Cytometry</td>
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<td></td>
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<tr>
<td>Immunohistology - Frozen</td>
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<tr>
<td>Immunofluorescence</td>
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</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.

### Target Species

**Species Cross Reactivity**

Reacts with: Rhesus Monkey, Pig

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

### Product Form

**Product Form:** Purified IgG - liquid

### Preparation

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

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

None present

### Carrier Free

Yes

### Endotoxin Level

<0.01 EU/µg
Approx. Protein Concentrations

IgG concentration 1 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

10. Lochhead, J.J. et al. (2010) Oxidative stress increases blood-brain barrier permeability and
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.


**Storage**

Store at -20°C only

This product should be stored undiluted.

Storage in frost free freezers is not recommended. 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 Secondary Antibodies**

Goat Anti Mouse IgG IgA IgM (STAR87...)<br>Alk. Phos., HRP

Goat Anti Mouse IgG (STAR77...)<br>HRP

Rabbit Anti Mouse IgG (STAR12...)<br>RPE

Rabbit Anti Mouse IgG (STAR8...)<br>DyLight®680

Rabbit Anti Mouse IgG (STAR13...)<br>HRP

Goat Anti Mouse IgG (STAR76...)<br>RPE

Goat Anti Mouse IgG (STAR70...)<br>FITC

Goat Anti Mouse IgG (H/L) (STAR117...)<br>Alk. Phos., DyLight®648, DyLight®649, DyLight®680, DyLight®800, FITC, HRP
Goat Anti Mouse IgG (Fc) (STAR120...)  FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)  FITC
Human Anti Mouse IgG1 (HCA036...)  HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL: Low Endotoxin (MCA1209EL)