### 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).

<table>
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<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<td>Flow Cytometry</td>
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<td>Functional Assays (1)</td>
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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 Biotin - liquid

#### 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 0.1 mg/ml

#### Immunogen
Activated, Lewis rat derived microglial cells.

#### External Database
UniProt:
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.

### 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. 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
Material Safety Datasheet documentation #10041 available at:

### Regulatory
For research purposes only

### Related Products

#### Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL: Biotin (MCA1209B)