Datasheet: MCA1334GA
BATCH NUMBER 1609

**Product Details**

**Description:** MOUSE ANTI RAT CD31

**Specificity:** CD31

**Other names:** PECAM-1

**Format:** Purified

**Product Type:** Monoclonal Antibody

**Clone:** TLD-3A12

**Isotype:** IgG1

**Quantity:** 0.1 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>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>yes</td>
<td>no</td>
<td></td>
<td>1/10 - 1/100</td>
</tr>
<tr>
<td>Immunohistology - Frozen</td>
<td>yes</td>
<td>no</td>
<td></td>
<td>1/10 - 1/100</td>
</tr>
<tr>
<td>Immunohistology - Paraffin</td>
<td></td>
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<tr>
<td>ELISA</td>
<td></td>
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<tr>
<td>Immunoprecipitation</td>
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<tr>
<td>Western Blotting</td>
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<tr>
<td>Immunofluorescence</td>
<td></td>
<td></td>
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<tr>
<td>Functional Assays (1)</td>
<td></td>
<td></td>
<td></td>
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</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. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
<table>
<thead>
<tr>
<th><strong>Product Form</strong></th>
<th>Purified IgG - liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preparation</strong></td>
<td>Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant</td>
</tr>
<tr>
<td><strong>Buffer Solution</strong></td>
<td>Phosphate buffered saline</td>
</tr>
<tr>
<td><strong>Preservative Stabilisers</strong></td>
<td>0.09% Sodium Azide</td>
</tr>
<tr>
<td><strong>Carrier Free</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Approx. Protein Concentrations</strong></td>
<td>IgG concentration 1.0 mg/ml</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Activated, Lewis rat derived microglial cells.</td>
</tr>
<tr>
<td><strong>External Database Links</strong></td>
<td>UniProt: <a href="https://www.uniprot.org/uniprot/Q3SWT0">Q3SWT0</a> Related reagents</td>
</tr>
<tr>
<td><strong>Synonyms</strong></td>
<td>Pecam</td>
</tr>
<tr>
<td><strong>RRID</strong></td>
<td>AB_2161159</td>
</tr>
<tr>
<td><strong>Fusion Partners</strong></td>
<td>Spleen cells from immunised BALB/c mouse were fused with cells of the mouse SP2 myeloma cell line.</td>
</tr>
<tr>
<td><strong>Specificity</strong></td>
<td><strong>Mouse anti Rat CD31 antibody, clone TLD-3A12</strong> 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 (<a href="https://www.ncbi.nlm.nih.gov/pubmed/19070216">Stevenson, K.S. et al. 2009</a>). 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. (<a href="https://www.ncbi.nlm.nih.gov/pubmed/17519814">Wilson et al. 2007</a>). Mouse anti Rat CD31, clone TLD-3A12 has been shown to be cross-reactive with endothelial cells derived from rhesus macaque (<a href="https://www.ncbi.nlm.nih.gov/pubmed/11397882">Maclean et al. 2001</a>).</td>
</tr>
<tr>
<td><strong>Flow Cytometry</strong></td>
<td>Use 10ul of the suggested working dilution to label $10^6$ cells in 100ul.</td>
</tr>
</tbody>
</table>


40. Sønstevold, T. et al. (2017) Hyperbaric oxygen treatment did not significantly affect


### 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.

### Guarantee

18 months from date of despatch.

### Health And Safety Information

Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1334GA

### Regulatory

For research purposes only

### Related Products

#### Recommended Secondary Antibodies

- Rabbit Anti Mouse IgG (STAR12...) RPE
- Goat Anti Mouse IgG IgA IgM (STAR87...) HRP
- Goat Anti Mouse IgG (STAR76...) RPE
- Rabbit Anti Mouse IgG (STAR13...) HRP
- Goat Anti Mouse IgG (STAR70...) FITC
- Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

- Rabbit Anti Mouse IgG (STAR9...) FITC
- Goat Anti Mouse IgG (STAR77...) HRP
- Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

#### Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA1209)