

## Datasheet: MCA1334B

**BATCH NUMBER 158798**

<b>Description:</b>	MOUSE ANTI RAT CD31:Biotin
<b>Specificity:</b>	CD31
<b>Other names:</b>	PECAM-1
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	TLD-3A12
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

### 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).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat
Functional Assays (1)			▪	

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.

#### Product Form

Purified IgG conjugated to Biotin - liquid

#### Preparation

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

#### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Activated, Lewis rat derived microglial cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q3SWT0</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">29583</a> Pecam1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Pecam
<b>RRID</b>	AB_566718
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mouse were fused with cells of the mouse SP2 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD31 antibody, clone TLD-3A12</b> recognizes rat PECAM-1 (CD31), a 661 amino acid type 1 transmembrane protein expressed primarily on endothelial cells, platelets and leucocytes.</p> <p>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="#">Stevenson, K.S. et al.2009</a>).</p> <p>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="#">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="#">Macleay et al. 2001</a>)</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Williams, K.C. <i>et al.</i> (1996) PECAM-1 (CD31) expression in the central nervous system and its role in experimental allergic encephalomyelitis in the rat. <a href="#">J Neurosci Res. 45 (6): 747-57.</a></li> <li>Nakao, A. <i>et al.</i> (2003) Carbon monoxide inhalation protects rat intestinal grafts from ischemia/reperfusion injury. <a href="#">Am J Pathol. 163: 1587-98.</a></li> <li>Stevenson, K.S. <i>et al.</i> (2009) Isolation, characterization, and differentiation of thy1.1-sorted pancreatic adult progenitor cell populations. <a href="#">Stem Cells Dev. 18 (10): 1389-98.</a></li> <li>Ott, I. <i>et al.</i> (2005) Endothelial-like cells expanded from CD34+ blood cells improve left ventricular function after experimental myocardial infarction. <a href="#">FASEB J. 19 (8): 992-4.</a></li> <li>Fujimoto, K.L. <i>et al.</i> (2007) An elastic, biodegradable cardiac patch induces contractile smooth muscle and improves cardiac remodeling and function in subacute myocardial</li> </ol>

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**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1334B>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Biotin \(MCA1209B\)](#)

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