Datasheet: MCA1334B

Description: MOUSE ANTI RAT CD31:Biotin

Specificity: CD31

Other names: PECAM-1

Format: Biotin

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.

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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


Regulatory

For research purposes only

Related Products

**Recommended Negative Controls**

**MOUSE IgG1 NEGATIVE CONTROL:** Biotin (MCA1209B)