

Datasheet: MCA1738PE

BATCH NUMBER 174086

Description:	MOUSE ANTI HUMAN CD31:RPE
Specificity:	CD31
Other names:	PECAM-1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	WM59
Isotype:	IgG1
Quantity:	100 TESTS

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/2

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Cynomolgus monkey, Rhesus Monkey

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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

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

supernatant

Buffer Solution Phosphate buffered saline

Preservative 0.09% sodium azide (NaN₃)
Stabilisers 1% bovine serum albumin
5% sucrose

External Database Links

UniProt:

[P16284](#) [Related reagents](#)

Entrez Gene:

[5175](#) PECAM1 [Related reagents](#)

RRID AB_322883

Specificity **Mouse anti Human CD31 antibody, clone WM59**, recognizes CD31, also known as platelet endothelial cell adhesion molecule 1 (PECAM-1), endoCAM and GPIIA'.

CD31 is a single-pass type I transmembrane glycoprotein belonging to the immunoglobulin superfamily, bearing six Ig-like domains. It is expressed on the surface of endothelial cells, platelets, monocytes, neutrophils, and some types of T-cells. CD31 forms homotypic and heterotypic interactions, including with CD38 and CD117. It is involved in various cellular processes, including the mediation of adhesion and transmigration of leukocytes across the endothelium, angiogenesis, wound healing, inflammation, and thrombosis.

CD31 is used to identify vascular tumors, such as angiosarcoma and hemangioma, and endothelial cells in normal and pathological tissues. CD31 expression is also a marker of endothelial dysfunction and atherosclerosis, and can be modulated by various factors, such as cytokines, shear stress, and hypoxia. Mutations in the PECAM1 gene encoding CD31 can cause platelet-type bleeding disorder 11, a rare condition characterized by mild to moderate bleeding tendency.

The binding epitope for mouse anti human CD31 antibody, clone WM59, has been mapped to the Ig-like domain 2 ([Fawcett *et al.* 1995](#)).

Mouse anti human CD31 antibody, clone WM59, is also available as a recombinant antibody ([TZA1738](#)).

Flow Cytometry Use 10µl of the suggested working dilution to label 10⁶ cells or 100µl whole blood

References

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Further Reading 1. DeLisser, H.M. *et al.* (1994) Molecular and functional aspects of PECAM-1/CD31. [Immunol Today. 15 \(10\): 490-5.](#)

Storage This product is shipped at ambient temperature.
Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.
DO NOT FREEZE.
This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1738PE>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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