

Datasheet: MCA1738

BATCH NUMBER 171462

Description:	MOUSE ANTI HUMAN CD31
Specificity:	CD31
Other names:	PECAM-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	WM59
Isotype:	IgG1
Quantity:	0.2 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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	<p>Reacts with: Cynomolgus monkey, Rhesus Monkey</p> <p>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.</p>
Product Form	Purified IgG - liquid

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

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.09% sodium azide (NaN₃)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0mg/ml

External Database Links

UniProt:

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

Entrez Gene:

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

RRID AB_322710

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 in 100µl

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. 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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1738>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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