

Datasheet: MCA1738SBV570

BATCH NUMBER 64760592

Description:	MOUSE ANTI HUMAN CD31:StarBright Violet 570
Specificity:	CD31
Other names:	PECAM-1
Format:	StarBright Violet 570
Product Type:	Monoclonal Antibody
Clone:	WM59
Isotype:	IgG1
Quantity:	100 TESTS/0.5ml

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)	▪			Neat

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.

(1)Staining at lower temperatures generally requires longer incubation to reach antibody binding equilibrium, and this effect is more pronounced for StarBright Dyes due to their larger size. For optimum staining, Bio-Rad recommends incubating samples either overnight at 4°C or 1 hour at room temperature.

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 StarBright Violet 570 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Violet 570	404	571

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 (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
External Database Links	UniProt: P16284 Related reagents Entrez Gene: 5175 PECAM1 Related reagents
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 <i>et al.</i> 1995). Mouse anti human CD31 antibody, clone WM59, is also available as a recombinant antibody (TZA1738).
Flow Cytometry	Use 5µl of the suggested working dilution to label 0.5x10 ⁶ cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.

References

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Further Reading	1. DeLisser, H.M. <i>et al.</i> (1994) Molecular and functional aspects of PECAM-1/CD31. Immunol Today. 15 (10): 490-5.
Storage	This product is shipped at ambient temperature. Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1738SBV570
Regulatory	For research purposes only

Related Products

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
'M451902:260710'

Printed on 21 Aug 2026

