Technical Data Sheet

PE Mouse Anti-Human CD31

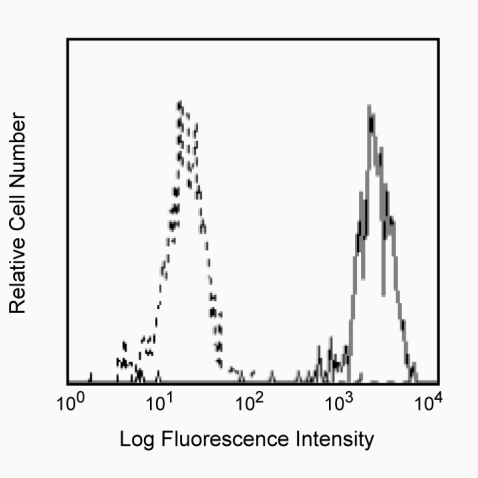
Product Information

Material Number:	**555446**
Alternate Name:	PECAM-1
Size:	100 tests
Vol. per Test:	20 µl
Clone:	WM59
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	V P025
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

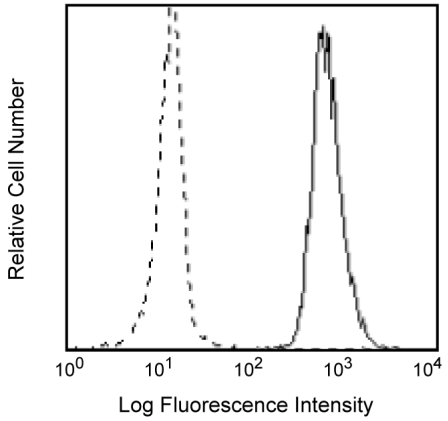
Description

Reacts with a 130 kDa glycoprotein, gpIIa', also known as platelet endothelial cell adhesion molecule-1, (PECAM-1). CD31 has wide tissue distrubution and is expressed on platelets, monocytes, granulocytes, and in high amounts on endothelial cells. This molecule has been implicated in a number of cellular phenomena, including vascular would healing and angiogenesis, and transendothelial migration of leukocytes in inflammatory responses.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of peripheral blood monocytes analyzed on a FACScan (BDIS, San Jose, CA)



Profile of peripheral blood granulocytes analyzed on a FACScan (BDIS, San Jose, CA)

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

For use in immunohistochemistry on tissue sections, Cat. No. 550389 is recommended.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555749	PE Mouse IgG1, κ Isotype Control	100 tests	MOPC-21

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

DeLisser HM, Newman PJ, Albelda SM. Platelet endothelial cell adhesion molecule (CD31). *Curr Top Microbiol Immunol.* 1993; 184:37-45. (Biology)

Muller WA, Weigl SA, Deng X, Phillips DM. PECAM-1 is required for transendothelial migration of leukocytes. *J Exp Med.* 1993; 178(2):449-460. (Biology)

Schlossman SF, Boumsell L, Gilks W, et al, ed. *Leukocyte Typing V: White Cell Differentiation Antigens.* New York: Oxford University Press; 1995. (Biology)

Vaporciyan AA, DeLisser HM, Yan HC, et al. Involvement of platelet-endothelial cell adhesion molecule-1 in neutrophil recruitment in vivo. *Science.* 1993; 262(5139):1580-1582. (Biology)