Technical Data Sheet

FITC Mouse Anti-Human CD31

Product Information

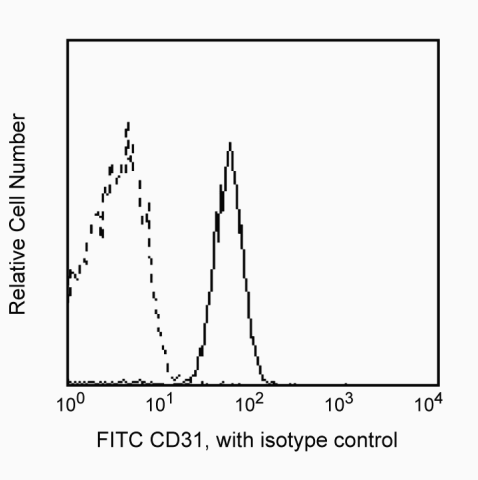
Material Number:	**557508**
Alternate Name:	PECAM-1
Size:	50 tests
Vol. per Test:	20 µl
Clone:	WM59
Isotype:	Mouse IgG1 κ
Reactivity:	Human QC Testing: Baboon or Rhesus or Cynomolgus
Workshop:	V P025
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

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.

Clone WM59 also cross-reacts with peripheral blood platelets and leukocytes of baboon, and both rhesus and cynomolgus macaque monkeys. The staining intensity of WM59+ platelets is similiar to that observed with peripheral blood platelets from normal human donors. Lymphocytes, monocytes, and granulocytes react less with WM59 than normal human leukocytes.

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 anti-CD31 reactivity on peripheral blood platelets of Rhesus macaque (Macaca mulatta) analyzed by flow cytometry.

Preparation and Storage

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

Application Notes

Application

Flow cytometry	Routinely Tested

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Suggested Companion Products

Catalog Number	Name	Size	Clone
551954	FITC Mouse IgG1 Kappa Isotype Control	50 tests	MOPC-21

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 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

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

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)

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)