

Technical Data Sheet

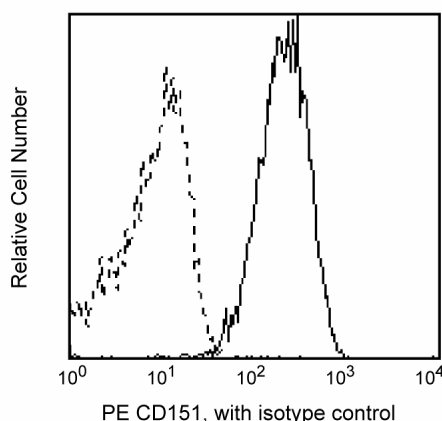
PE Mouse Anti-Human CD151

Product Information

Material Number:	556057
Alternate Name:	PETA-3
Size:	100 tests
Vol. per Test:	20 µl
Clone:	14A2.H1
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VI E12,P49
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with platelet-endothelial cell tetraspan antigen-3 (PETA-3), a 27 kD membrane glycoprotein, expressed on platelets, megakaryocytes, lymphocytes (weak), monocytes, endothelial cells and epithelial cells. PETA-3 (CD151) associates with $\beta 1$ integrin in certain tissues. This has also been shown with other tetraspan superfamily members, like CD9, CD63 and $\alpha 5\beta 1$. Reports indicate that this association or colocalization of CD151 with $\beta 1$ integrin in tissues suggests a functional role of this molecule, however, this role has not been elucidated yet. It has also been reported that antibody 14A2.H1 is capable of platelet activation in vitro. Studies showed that different clones of CD151 monoclonal antibodies display strikingly different patterns of binding to human haemopoietic cells and tissue sections, and that this is due at least in part to the presence of the protein in complexes with different integrins.



Profile of peripheral blood platelets 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 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
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Suggested Companion Products

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

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10⁶ cells in a 100- μ l 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/pharming/protocols for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharming/colors.
5. 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.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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- Geary SM, Cambareri AC, Sincock PM, et al. *Tissue Antigens*. 2001; 58:141-153.(Clone-specific: Flow cytometry, Immunohistochemistry, Immunoprecipitation)
- Roberts JJ, Rodgers SE, Drury J, Ashman LK, Lloyd JV. Platelet activation induced by a murine monoclonal antibody directed against a novel tetra-span antigen. *Br J Haematol*. 1995; 89(4):853-860.(Biology)
- Sincock PM, Mayrhofer G, Ashman LK. Localization of the transmembrane 4 superfamily (TM4SF) member PETA-3 (CD151) in normal human tissues: comparison with CD9, CD63, and alpha5beta1 integrin. *J Histochem Cytochem*. 1997; 45(4):515-525.(Biology)