Technical Data Sheet

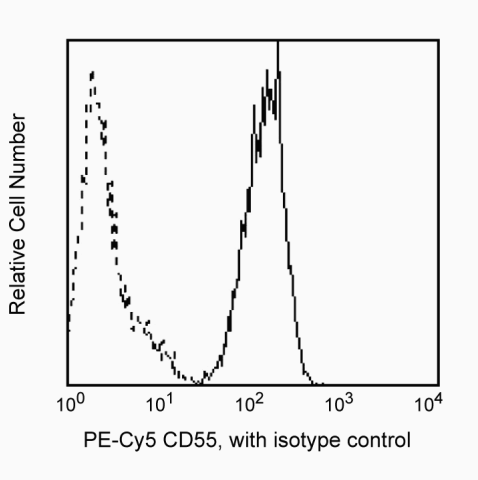
PE-Cy™5 Mouse Anti-Human CD55

Product Information

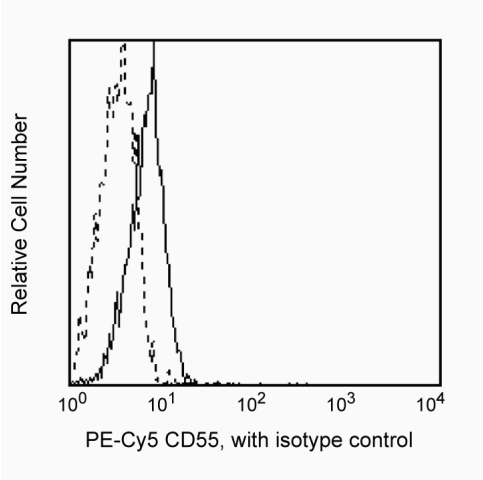
Material Number:	**555695**
Alternate Name:	DAF
Size:	100 tests
Vol. per Test:	20 µl
Clone:	IA10
Isotype:	Mouse IgG2a, κ
Reactivity:	QC Testing: Human
Workshop:	V BP352, S031
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with CD55, decay-accelerating factor (DAF), a glycosylphosphatidylinositol (GPI)-anchored single chain glycoprotein of approximately 70 kDa, expressed on hematopoietic cells. It has been suggested that the role of DAF is to protect cells from damage by autologous complement preventing the amplification steps of the complement cascade by interfering with the assembly of the C3-convertases, C4b2a and C3bBb, and the C5-convertases, C4b2a3b and C3bBb3b.



Profile of K562 cells expressing glycosylphosphatidylinositol (GPI) anchor protein analyzed on a FACScan (BDIS, San Jose, CA)



Profile of glycosylphosphatidylinositol (GPI) anchor-defective mutant cell line 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 PE-Cy5 (formerly known as BD Cy-Chrome™) under optimum conditions, and unconjugated antibody and free PE-Cy5 were removed.
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555575	PE-Cy™5 Mouse IgG2a, κ Isotype Control	100 tests	G155-178

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.

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3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
5. PE-Cy5 is a tandem fluorochrome composed of R-phycoerythrin (PE), which is excited by the 488 nm light of an Argon ion laser and serves as an energy donor, coupled to the cyanine dye Cy5, which acts as an energy acceptor and fluoresces at 670 nm. BD Biosciences Pharmingen has maximized the fluorochrome energy transfer in PE-Cy5, thus maximizing its fluorescence emission intensity, minimizing residual emission from PE, and minimizing lot-to-lot variation.
6. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
7. This product is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp. This product is licensed for sale only for research. It is not licensed for any other use. If you require a commercial license to use this product and do not have one return this material, unopened to BD Biosciences, 10975 Torreyana Rd, San Diego, CA 92121 and any money paid for the material will be refunded.
8. PE-Cy5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the PE-Cy5 tandem fluorochrome, extra care must be taken when using dual-laser cytometers which may directly excite both PE and Cy5™.
9. 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.
10. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Kinoshita T, Medof ME, Silber R, Nussenzweig V. Distribution of decay-accelerating factor in the peripheral blood of normal individuals and patients with paroxysmal nocturnal hemoglobinuria. *J Exp Med.* 1985; 162(1):75-92. (Biology)

Loveland BE, Szokolai K, Johnstone RW, McKenzie IF. Coordinate functions of multiple complement regulating molecules, CD46, CD55, and CD59. *Transplant Proc.* 1994; 26(3):1070-1071. (Biology)

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