Technical Data Sheet

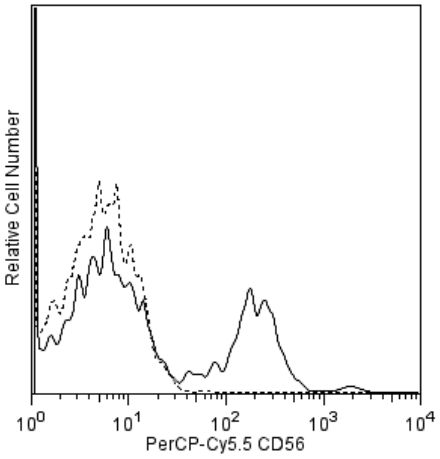
PerCP-Cy™5.5 Mouse Anti-Human CD56

Product Information

Material Number:	**560842**
Alternate Name:	NCAM1; NCAM-1; Neural cell adhesion molecule 1; NCAM; MSK39
Size:	50 tests
Vol. per Test:	5 µl
Clone:	B159
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	V NK75
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The B159 monoclonal antibody specifically reacts with CD56. CD56 is a heavily glycosylated protein that is present on a subpopulation of peripheral blood large granular lymphocytes which demonstrate natural killer activity. CD56 is also expressed on a subset of T cells but is not expressed on myeloid cells, erythrocytes or B cells. This antigen is a pan-NK-cell marker. CD56 is virtually identical to an isoform of the neutral cell adhesion molecule (NCAM), a structure mediating homotypic and heterotypic cell-cell interactions.



Flow cytometric analysis of CD56 expression on human peripheral blood lymphocytes. *Whole blood was stained with PerCP-Cy™5.5 Mouse Anti-Human CD56 antibody (Cat. No. 560842; solid line histogram) or with a PerCP-Cy™5.5 Mouse IgG1, κ Isotype Control (Cat. No. 550795 used at a matching concentration; dashed line histogram). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.*

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
550795	PerCP-Cy™5.5 Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 ml	(none)

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).

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2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
4. This PerCP-conjugated product is sold under license to the following patent: US Patent No. 4,876,190.
5. 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.
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7. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
8. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
9. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
10. 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.
11. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
12. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V.* New York: Oxford University Press; 1995. (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)