

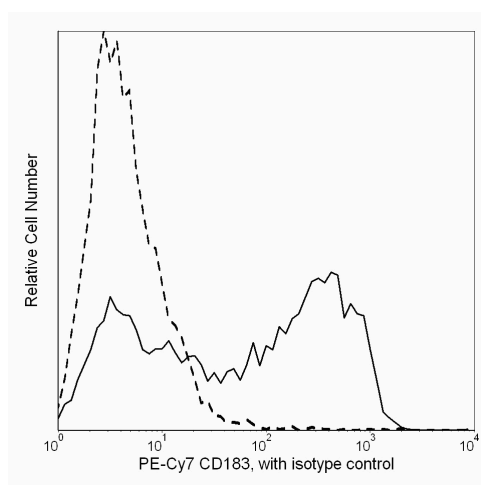
Technical Data Sheet

PE-Cy™7 Mouse Anti-Human CD183**Product Information**

Material Number:	560831
Alternate Name:	CXCR3; C-X-C chemokine receptor type 3; GPR9; IP10R; MigR; CKRL2; CMKAR3
Size:	50 tests
Vol. per Test:	5 µl
Clone:	1C6/CXCR3
Immunogen:	Human CXCR3 Peptide
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VII 70500
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 1C6/CXCR3 monoclonal antibody specifically binds to human CD183, also known as the CXCR3 chemokine receptor. CD183 is a 40-41 kDa seven-transmembrane protein and member of the G protein-coupled receptor family. CD183 is expressed primarily on activated T cells that infiltrate inflammatory sites. It has also been detected on some circulating T cells, B cells, and NK cells. Reports show that some CXCR3-positive T cells also express CCR5 and are mostly CD45RO-positive cells. Three ligands for CXCR3 have been identified. They are CXCL9 (Mig/monokine induced by interferon-γ), CXCL10 (IP-10/interferon-γ inducible 10-kD protein), and CXCL11 (I-TAC/interferon-inducible T-cell alpha chemoattractant). These chemokines are produced by a variety of cells upon stimulation by IFN-γ and interact with CXCR3 to mediate T-cell chemotaxis. This reagent has been reported to be suitable for immunohistochemical staining of acetone-fixed, frozen sections and/or formalin-fixed, paraffin-embedded tissue sections with citrate pretreatment. Clone 1C6/CXCR3 also cross reacts with a subset of peripheral blood lymphocytes of baboon, and both rhesus and cynomolgus macaque monkeys. The distribution of lymphocytes is similar to that observed with CD183-positive peripheral blood lymphocytes from normal human donors. CXCR3 has been clustered as CD183 in the VIIth HLDA workshop.



Flow cytometric analysis of CD183 (CXCR3) expression on human peripheral blood lymphocytes. Whole blood was stained with PE-Cy™7 Mouse Anti-Human CD183 antibody (Cat. No. 560831; solid line histogram) or with a PE-Cy™7 Mouse IgG1 κ Isotype Control (Cat. No. 557872; 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 PE-Cy7 under optimum conditions, and unconjugated antibody and free PE-Cy7 were removed.

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
557872	PE-Cy7 TM Mouse IgG1 κ Isotype Control	100 tests	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- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Warning: Some APC-Cy7 and PE-Cy7 conjugates show changes in their emission spectrum with prolonged exposure to formaldehyde. If you are unable to analyze fixed samples within four hours, we recommend that you use BDTM Stabilizing Fixative (Cat. No. 338036).
4. 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.
5. 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.
6. PE-Cy7 is a tandem fluorochrome composed of R-phycoerythrin (PE), which is excited by 488-nm light and serves as an energy donor, coupled to the cyanine dye Cy7, which acts as an energy acceptor and fluoresces maximally at 780 nm. PE-Cy7 tandem fluorochrome emission is collected in a detector for fluorescence wavelengths of 750 nm and higher. Although every effort is made to minimize the lot-to-lot variation in the efficiency of the fluorochrome energy transfer, differences in the residual emission from PE may be observed. Therefore, we recommend that individual compensation controls be performed for every PE-Cy7 conjugate. PE-Cy7 is optimized for use with a single argon ion laser emitting 488-nm light, and there is no significant overlap between PE-Cy7 and FITC emission spectra. When using dual-laser cytometers, which may directly excite both PE and Cy7, we recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
7. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
8. 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.
9. 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.
10. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
11. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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