Technical Data Sheet

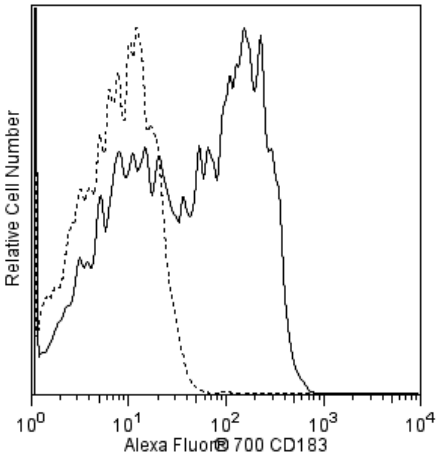
Alexa Fluor® 700 Mouse Anti-Human CD183

Product Information

Material Number:	**561320**
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 protein stabilizer 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 expression on human lymphocytes. *Human whole blood was stained with the Alexa Fluor® 700 Mouse anti-Human CD183 antibody (Cat. No. 561320; solid line histogram) or with an Alexa Fluor® 700 Mouse IgG1, κ Isotype Control (Cat. No. 557882; 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.*

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Preparation and Storage

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

The antibody was conjugated to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was 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
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)
557882	Alexa Fluor® 700 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21

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. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
5. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. 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.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

References

Loetscher M, Gerber B, Loetscher P, et al. Chemokine receptor specific for IP10 and mig: structure, function, and expression in activated T-lymphocytes. *J Exp Med.* 1996; 184(3):963-969. (Biology)

Piali L, Weber C, LaRosa G, et al. The chemokine receptor CXCR3 mediates rapid and shear-resistant adhesion-induction of effector T lymphocytes by the chemokines IP10 and Mig. *Eur J Immunol.* 1998; 28(3):961-972. (Biology)

Qin S, Rottman JB, Myers P, et al. The chemokine receptors CXCR3 and CCR5 mark subsets of T cells associated with certain inflammatory reactions. *J Clin Invest.* 1998; 101(4):746-754. (Clone-specific: Flow cytometry)