

Technical Data Sheet

BV510 Rat Anti-Human CXCR5

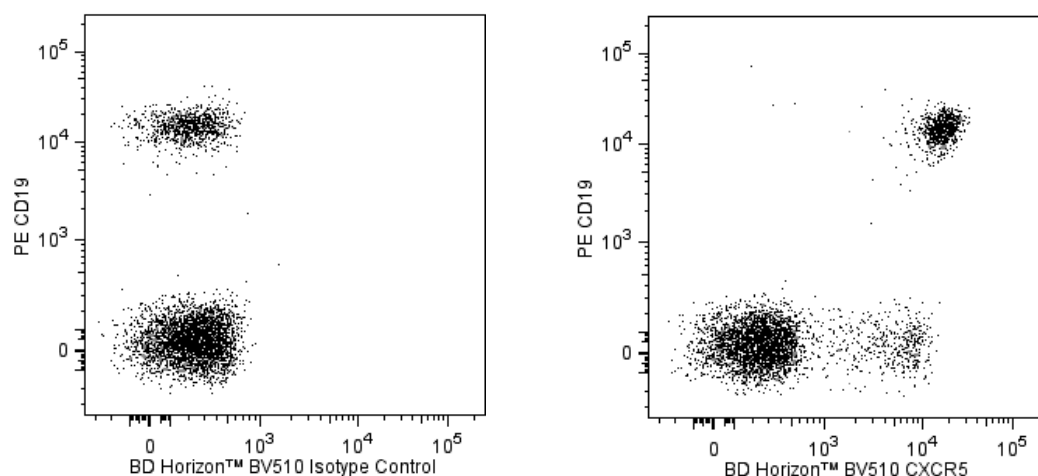
Product Information

Material Number:	563105
Alternate Name:	CD185; Chemokine C-X-C motif receptor 5; BLR1; MDR-15
Size:	50 tests
Vol. per Test:	5 µl
Clone:	RF8B2
Immunogen:	Human CXCR5
Isotype:	Rat (LOU) IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The RF8B2 monoclonal antibody specifically binds to the human CXC chemokine receptor, CXCR5. CXCR5 (also known as CD185, BLR-1 NLR and MDR15), a seven transmembrane, G-protein-coupled receptor, is the specific receptor for CXC chemokine, CXCL13/BLC/BCA-1. In peripheral blood, CXCR5 expression is restricted to B lymphocytes and a small subset of CD4+ and CD8+ lymphocytes. The restricted expression pattern of CXCR5 on B cells and follicular T helper cells (T_{fh}) suggests that this receptor functions as a regulator of B and T cell migration. Stimulation of T cells with anti-CD3 monoclonal antibody leads to the down-regulation of CXCR5.

The antibody was conjugated to BD Horizon™ BV510 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon™ BV510 can be excited by the violet laser and detected in the BD Horizon™ V500 (525/50-nm) filter set. BD Horizon™ BV510 conjugates are useful for the detection of dim markers off the violet laser.



Two-color flow cytometric analysis of CXCR5 expression on human peripheral blood lymphocytes. Whole blood cells were stained with PE Mouse anti-Human CD19 antibody (Cat. No. 555413/561741) and either BD Horizon™ BV510 Rat IgG2b, κ Isotype Control (Cat. No. 562951, Left Panel) or BD Horizon™ BV510 Mouse anti-Human CXCR5 antibody (Cat. No. 563105; Right Panel). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Two-color flow cytometric dot plots showing the correlated expression of CXCR5 (or Ig isotype control staining) versus CD19 were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometric analysis 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 BD Horizon™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 were removed.

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
555899	Lysing Buffer	100 ml	(none)
562951	BV510 Rat IgG2b, κ Isotype Control	50 μ g	R35-38
555413	PE Mouse Anti-Human CD19	100 tests	HIB19
561741	PE Mouse Anti-Human CD19	25 tests	HIB19

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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Brilliant Violet™ 510 is a trademark of Sirigen.

References

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Forster R, Emrich T, Kremmer E, Lipp M. Expression of the G-protein--coupled receptor BLR1 defines mature, recirculating B cells and a subset of T-helper memory cells. *Blood.* 1994; 84(3):830-840. (Immunogen: Flow cytometry, Immunohistochemistry)

Gunn MD, Ngo VN, Ansel KM, Ekland EH, Cyster JG, Williams LT. A B-cell-homing chemokine made in lymphoid follicles activates Burkitt's lymphoma receptor-1. *Nature.* 1998; 391(6669):799-803. (Biology)

Kouba M, Vanetti M, Wang X, Schafer M, Holt V. Cloning of a novel putative G-protein-coupled receptor (NLR) which is expressed in neuronal and lymphatic tissue. *FEBS Lett.* 1993; 321(2-3):173-178. (Biology)

Legler DF, Loetscher M, Roos RS, Clark-Lewis I, Baggiolini M, Moser B. B cell-attracting chemokine 1, a human CXC chemokine expressed in lymphoid tissues, selectively attracts B lymphocytes via BLR1/CXCR5. *J Exp Med.* 1998; 187(4):655-660. (Biology)

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