

Technical Data Sheet

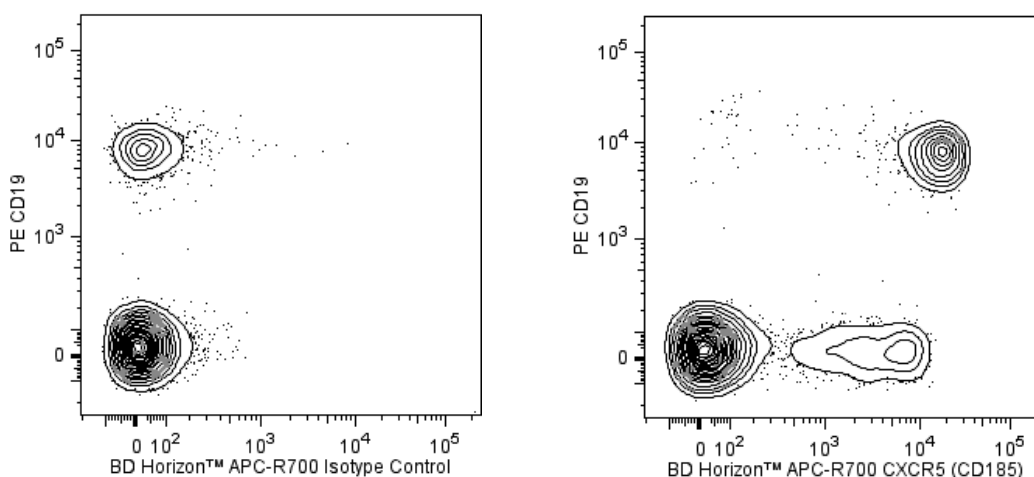
APC-R700 Rat Anti-Human CXCR5 (CD185)**Product Information**

Material Number:	565191
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 (CD185)
Isotype:	Rat (LOU) IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, glycerol 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.

This antibody was conjugated to BD Horizon APC-R700, which has been developed exclusively by BD Biosciences as a better alternative to Alexa Fluor® 700. APC-R700 excites and emits at similar wavelengths to Alexa Fluor® 700 yet exhibits significantly improved brightness. This dye can be excited by the red laser and detected with the same filter set as Alexa Fluor® (eg, 730/45-nm filter).



Two-color flow cytometric analysis of CXCR5 (CD185) expression on human peripheral blood lymphocytes. Whole blood was stained with PE Mouse Anti-Human CD19 antibody (Cat. No. 555413/561741) and either BD Horizon™ APC-R700 Rat IgG2b, κ Isotype Control (Cat. No. 564984; Left Plot) or BD Horizon APC-R700 Mouse Anti-Human CXCR5 (CD185) antibody (Cat. No. 565191; Right Plot). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). Two-color flow cytometric contour plots showing the correlated expression of CXCR5 (CD185) [or Ig isotype control staining] versus CD19 were derived from gated events with the forward and side light-scatter characteristics of intact 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 APC-R700 under optimum conditions, and unconjugated antibody and free BD Horizon APC-R700 were removed.

Application Notes**Application**

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
564984	APC-R700 Rat IgG2b, κ Isotype Control	0.1 mg	R35-38
555413	PE Mouse Anti-Human CD19	100 Tests	HIB19
561741	PE Mouse Anti-Human CD19	25 Tests	HIB19
349202	BD FACS™ Lysing Solution	100 mL	(none)
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.
5. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. 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.
8. 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.
9. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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- 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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