

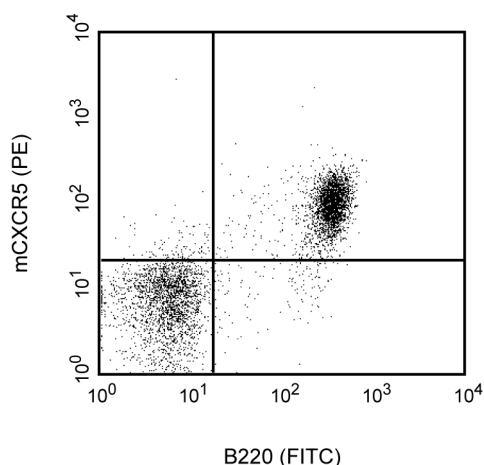
Technical Data Sheet

PE Rat Anti-Mouse CD185 (CXCR5)**Product Information**

Material Number:	551959
Alternate Name:	Blr1; C-X-C chemokine receptor type 5; CXC-R5; CXCR-5; Gpcr6; MDR15
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	2G8
Immunogen:	Mouse CXCR5
Isotype:	Rat (LOU) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 2G8 monoclonal antibody specifically binds to the mouse C-X-C Chemokine Receptor type 5, CXCR5. CXCR5 is also known as CD185, BLR1, NLR and MDR15. CXCR5 is a seven-transmembrane, G-protein-coupled receptor that is specific for the CXC chemokine, CXCL13/BLC/BCA-1. The expression of CXCR5 has been detected in spleen, lymph nodes, tonsils, brain, bone marrow, T cells, B cells, cerebrum, cerebellum, hippocampus and pituitary. In mouse spleen, CXCR5 was strictly expressed by mature B cells and a small subset of T lymphocytes. CXCR5 plays a role in directing the migration of B and T cells to B cell follicles with the spleen and certain other lymphoid tissues. The immunogen used to generate 2G8 hybridoma was a recombinant protein containing N-terminal amino acids of mouse CXCR5 (GST-NmBLR1).



Flow cytometric analysis of CD185 (CXCR5) expression on mouse splenocytes. Splenocytes were stained with FITC Rat Anti-Mouse CD45R/B220 (Cat. No. 551959) and PE Rat Anti-Mouse CD185 (CXCR5) (Cat. No. 551959/561988). Two-color dot plot depicting CD185 (CXCR5) and CD45R/B220 expression were derived from gated events with the side and forward light-scattering characteristics of viable lymphocytes. The quadrant markers for the bivariate dot plots were set based on the PE Rat IgG2a, κ Isotype Control (Cat. No. 553930) staining.

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes**Application**

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

The PE-conjugated 2G8 antibody is convenient for the immunofluorescent staining and flow cytometric analyses of mouse leukocytes and cell lines that express CXCR5 (see figure). Chemokine receptors are known to internalize during manipulation resulting in low frequency expression. Immunophenotyping studies of chemokine receptors need to be performed on freshly collected whole blood (<24 Hrs). Incubation with the antibody should be done in the dark. Cellular manipulation, such as Ficoll separation, freezing, or exposure to cold temperatures prior to staining should be minimized, as these treatments have been shown to cause a decrease in staining intensity and inconsistent results.

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Investigators should note that alternative staining procedures may be necessary. A multiple-step staining procedure is recommended, in some instances, to amplify immunofluorescent signals for the flow cytometric analysis of mouse CXCR5 expression. Investigators may find the Purified Rat Anti-Mouse CD185 (CXCR5) antibody (Cat. No. 551961) to be useful in conjunction with appropriate secondary and tertiary reagents for detecting low frequency expression, such as with Biotin Mouse Anti-Rat IgG2a (Cat. No. 553894) and PE Streptavidin (Cat. No. 554061) or FITC Streptavidin (Cat. No. 554060).

Suggested Companion Products

Catalog Number	Name	Size	Clone
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
553088	FITC Rat Anti-Mouse CD45R/B220	0.5 mg	RA3-6B2
551961	Purified Rat Anti-Mouse CD185 (CXCR5)	0.1 mg	2G8
553894	Biotin Mouse Anti-Rat IgG2a	0.5 mg	RG7/1.30
554061	PE Streptavidin	0.5 mg	(none)
554060	FITC Streptavidin	0.5 mg	(none)
561988	PE Rat Anti-Mouse CD185 (CXCR5)	25 μ g	2G8
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. 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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at wwwbdbiosciences.com/colors.
5. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
6. Please refer to wwwbdbiosciences.com/us/s/resources for technical protocols.

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