Technical Data Sheet

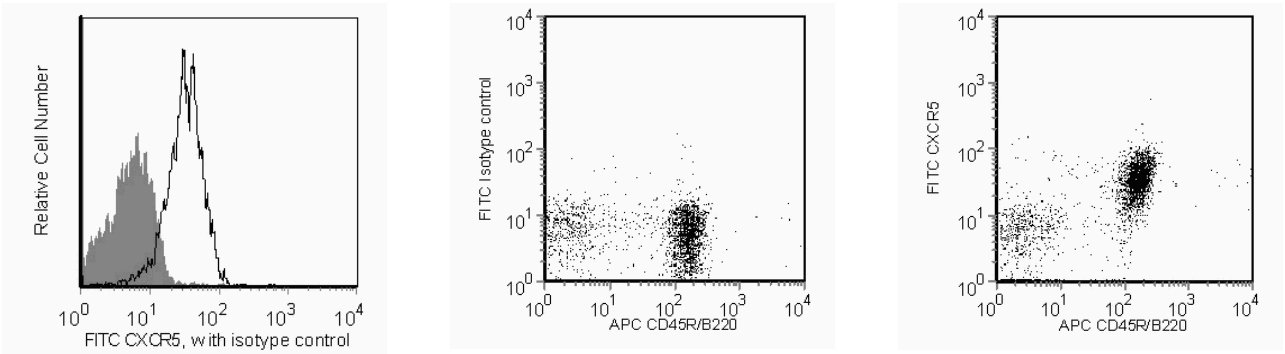
FITC Rat Anti-Mouse CXCR5

Product Information

Material Number:	**560577**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	2G8
Immunogen:	Mouse CXCR5
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The monoclonal antibody 2G8 reacts with the mouse CXC chemokine receptor, CXCR5. CXCR5 (*a.k.a.* BLR1, NLR and MDR15), a seven-transmembrane, G-protein-coupled receptor, is the specific receptor for CXC chemokines, 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, hippcampus and pituitary. In mouse spleen, CXCR5 was strictly expressed by mature B cells and a small subset of T lymphocytes. 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 CXCR5 on mouse splenocytes. Left Panel: *Splenocytes from C57BL/6 mice were stained either with a FITC Rat IgG2a, κ isotype control (shaded) or with the FITC Rat Anti-Mouse CXCR5 antibody (unshaded). Histograms were derived from gated events based on light scattering characteristics for CD45R/B220+ cells.* ***Middle and Right Panels:*** *Splenocytes from C57BL/6 mice were stained with both a APC Rat Anti-Mouse CD45R/B220 antibody (Cat.No. 553092) and either a FITC Rat IgG2a, κ isotype control (middle panel) or the FITC Rat Anti-Mouse CXCR5 antibody (right panel). Dot plots were derived from gated events based on light scattering characteristics for splenocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry 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 FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

Flow cytometry: Chemokine receptors are known to internalize during manipulation resulting in low frequency expression. Investigators are advised to perform immunophenotyping studies of chemokine receptors on freshly collected samples (<24 Hrs). Incubation with the antibody should be done at 4°C in the dark. Cellular manipulation, such as Ficoll separation, freezing, or exposure to cold temperatures prior to staining should be minimized and have been shown to cause a decrease in staining intensity and/or inconsistent results.

Investigators should note that alternative staining procedures may be neccessary. A multiple-step staining procedure is strongly 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 CXCR5 antibody (MN 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 (MN 553894) and PE Streptavidin (MN 554061) or FITC Streptavidin (MN 554060).

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553929	FITC Rat IgG2a, κ Isotype Control	0.25 mg	R35-95
551961	Purified Rat Anti-Mouse CXCR5	0.1 mg	2G8
553894	Biotin Mouse Anti-Rat IgG2a	0.5 mg	RG7/1.30
554060	FITC Streptavidin	0.5 mg	(none)
553092	APC Rat Anti-Mouse CD45R/B220	0.1 mg	RA3-6B2
554061	PE Streptavidin	0.5 mg	(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 Fluorochrome Web Page at www.bdbiosciences.com/colors.
5. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Forster R, Mattis AE, Kremmer E, Wolf E, Brem G, Lipp M. A putative chemokine receptor, BLR1, directs B cell migration to defined lymphoid organs and specific anatomic compartments of the spleen. *Cell.* 1996; 87(6):1037-1047. (Immunogen)

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Kouba M, Vanetti M, Wang X, Schafer M, Hollt 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)