

Technical Data Sheet

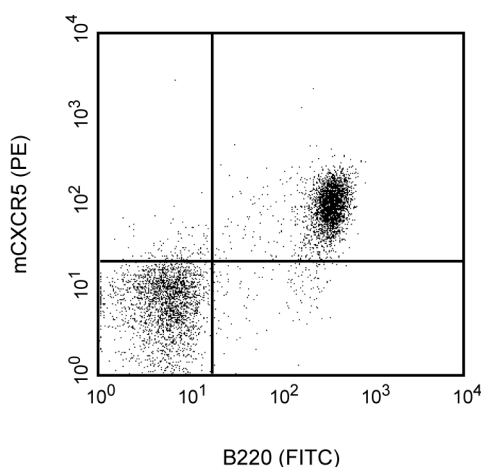
PE Rat Anti-Mouse CXCR5

Product Information

Material Number:	551959
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	2G8
Immunogen:	Mouse CXCR5
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ 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, hippocampus 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).



Detection of CXCR5 expression on mouse splenocytes by PE-conjugated 2G8. Mouse splenocytes were stained with 1.0 μ g/test of PE-conjugated 2G8 and anti-mouse CD45R/B220-FITC (Cat. No. 553088). The data reflects gating on lymphocytes, based on forward and side scattered light signals. The level of nonspecific staining was assessed by using PE-conjugated rat IgG2a (Cat. No. 553930) as isotype control. The quadrant markers for the bivariate dot plots were set based on the isotype control.

Preparation and Storage

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.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry

Routinely Tested

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

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should be minimized, as these treatments have been shown to cause a decrease in staining intensity and inconsistent results. A multiple-step staining procedure is recommended to amplify immunofluorescent signals of low frequency expression of chemokine receptors. Purified, unconjugated, 2G8 antibody, Cat. No. 551961 and a 3-step staining procedure is recommended for detecting low frequency expression of mouse CXCR5.

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
553088	FITC Rat Anti-Mouse CD45R/B220	0.5 mg	RA3-6B2

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
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.

References

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