

DESCRIPTION

Species Reactivity	Human
Specificity	Stains human CXCR5 transfectants but not the parental cell lines in flow cytometry. Does not cross-react with human CXCR2, CXCR3, or CXCR4 transfectants.
Source	Monoclonal Mouse IgG _{2B} Clone # 51505
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human CXCR5 Met1-Phe372 Accession # P32302
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

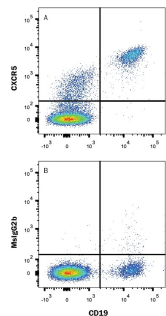
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
CyTOF-reported	Ferrell, P.B., Jr. <i>et al.</i> (2016) PLoS ONE 11: e0153207. Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Neutralization	Measured by its ability to neutralize CXCL13/BLC/BCA-1-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR5. The Neutralization Dose (ND ₅₀) is typically 0.25-1.5 µg/mL in the presence of 0.05 µg/mL Recombinant Human CXCL13/BLC/BCA-1.	

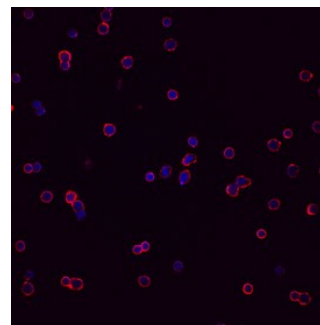
DATA

Flow Cytometry



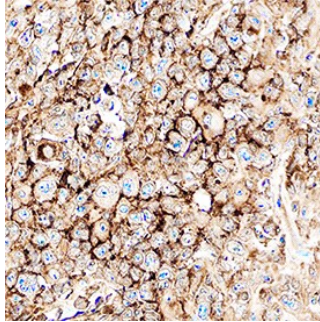
Detection of CXCR5 in CD19+ Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD19 APC-conjugated Monoclonal Antibody (Catalog # [FAB4867A](#)) and either (A) Mouse Anti-Human CXCR5 Monoclonal Antibody (Catalog # MAB190) or (B) Mouse IgG2B control antibody (Catalog # [MAB0041](#)) followed by anti-Mouse IgG PE-conjugated secondary antibody (Catalog # [F0102B](#)). View our protocol for [Staining Membrane-associated Proteins](#).

Immunocytochemistry



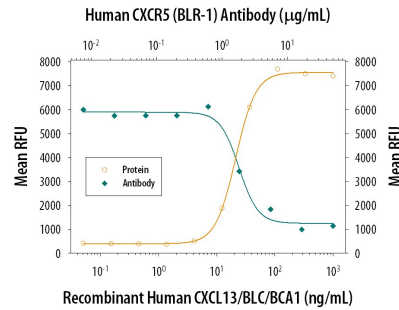
CXCR5 in Human PBMCs. CXCR5 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Mouse Anti-Human CXCR5 Monoclonal Antibody (Catalog # MAB190) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 637-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # [NL008](#)) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

Immunohistochemistry



CXCR5 in Human Kidney. CXCR5 was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human CXCR5 Monoclonal Antibody (Catalog # MAB190) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cell membranes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Neutralization



Chemotaxis Induced by CXCL13/BLC/BCA-1 and Neutralization by Human CXCR5 Antibody. Recombinant Human CXCL13/BLC/BCA-1 (Catalog # 801-CX) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR5 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Human CXCL13/BLC/BCA-1 (0.05 µg/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human CXCR5 Monoclonal Antibody (Catalog # MAB190). The ND₅₀ is typically 0.25-1.5 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CXCR5, also known as BLR-1, is a 7 transmembrane domain protein expressed on B cells. CXCR5 mediates B cell migration following binding of CXCL13.