

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CXCR3.
Source	Monoclonal Mouse IgG ₁ Clone # 49801
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human CXCR3 Met1-Leu368 Accession # P49682
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 and NaCl 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.

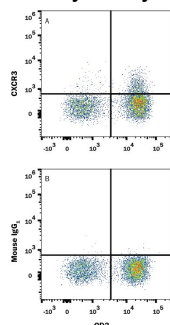
APPLICATIONS

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
Immunohistochemistry	8-25 µg/mL	See Below
CyTOF-ready	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 CXCL11/I-TAC-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR3. The Neutralization Dose (ND ₅₀) is typically 0.3-1.5 µg/mL in the presence of 7 ng/mL Recombinant Human CXCL11/I-TAC.	

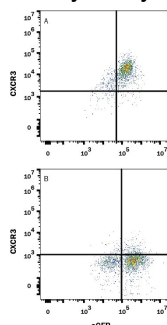
DATA

Flow Cytometry



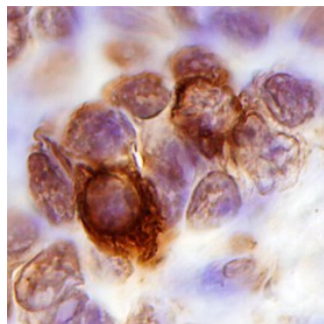
Detection of CXCR3 in Human PBMC Lymphocytes by Flow Cytometry. Human PBMC lymphocytes were stained with (A) Mouse Anti-Human CXCR3 Monoclonal Antibody (Catalog # MAB160) or (B) Mouse IgG1 isotype control antibody (Catalog # MAB002) followed by PE-conjugated anti-Mouse IgG Secondary Antibody (Catalog # F0102B) and Mouse Anti-Human CD3 epsilon APC-conjugated Monoclonal Antibody (Catalog # FAB100A). View our protocol for [Staining Membrane-associated Proteins](#).

Flow Cytometry



Detection of CXCR3 in HEK293 Human Cell Line Transfected with human CXCR3 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with (A) human CXCR3 or (B) irrelevant transfectants and eGFP was stained with and either Mouse Anti-Human CXCR3 Monoclonal Antibody (Catalog # MAB160) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on Mouse IgG1 Flow Cytometry Isotype Control (Catalog # MAB002). View our protocol for [Staining Membrane-associated Proteins](#).

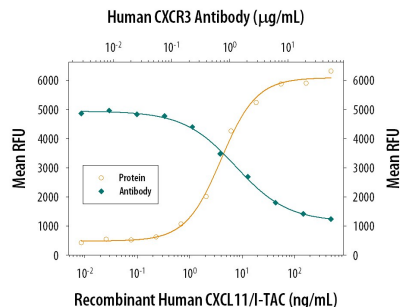
Immunohistochemistry



CXCR3 in Human Tonsil.

CXCR3 was detected in immersion fixed paraffin-embedded sections of human tonsil using Human CXCR3 Monoclonal Antibody (Catalog # MAB160) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counter-stained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

Neutralization



Chemotaxis Induced by CXCL11/I-TAC and Neutralization by Human CXCR3 Antibody. Recombinant Human CXCL11/I-TAC (Catalog # 672-IT) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR3 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 CXCL11/I-TAC (7 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human CXCR3 Monoclonal Antibody (Catalog # MAB160). The ND₅₀ is typically 0.3-1.5 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

CXCR3 is a G protein-coupled chemokine receptor that binds the α chemokines MIG (CXCL9), IP-10 (CXCL10), and I-TAC (CXCL11). CXCR3 is expressed on activated T cells, B cells, and NK cells.