

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CCR5.
Source	Monoclonal Mouse IgG _{2B} Clone # 45531
Purification	Protein A or G purified from ascites
Immunogen	NS0 mouse myeloma cell line transfected with human CCR5 Met1-Leu352 Accession # P51681
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 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	2.5 µg/10 ⁶ cells	Human CCR5 transfected NS0 cells
Immunocytochemistry	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 CCL3/MIP-1α-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR5. The Neutralization Dose (ND ₅₀) is typically 5-20 µg/mL in the presence of 40 ng/mL Recombinant Human CCL3/MIP-1α isoform LD78a.	

DATA

Neutralization

Chemotaxis Induced by CCL3/MIP-1α and Neutralization by Human CCR5 Antibody. Recombinant Human CCL3/MIP-1α (Catalog # 270-LD) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR5 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 CCL3/MIP-1α (40 ng/mL) is neutralized (green line) by increasing concentrations of Human CCR5 Monoclonal Antibody (Catalog # MAB182). The ND₅₀ is typically 5-20 µg/mL.

Immunocytochemistry

CCR5 in Human Dendritic Cells. CCR5 was detected in immersion fixed human dendritic cells using Human CCR5 Monoclonal Antibody (Catalog # MAB182) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

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

CCR5 is a G protein-linked seven transmembrane domain chemokine receptor. CCR5 serves as a receptor for several chemokines including MIP-1α, MIP-1β, MCP-2, and RANTES. It also functions as a coreceptor for macrophage tropic HIV-1 infection.