

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CCR7.
Source	Monoclonal Rat IgG _{2A} Clone # 4B12
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	RBC-2H3 cells expressing mouse CCR7 Accession # NP_031745
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.

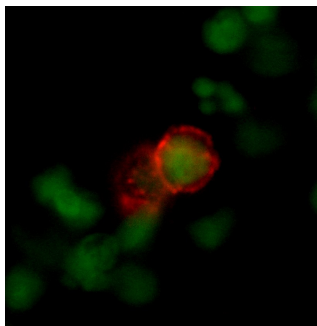
APPLICATIONS

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	0.25 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below
CyTOF-reported	Spitzer, M. <i>et al.</i> (2015) <i>Science</i> 349 : 1259425. 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 CCL19/MIP-3β-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with mouse CCR7. The Neutralization Dose (ND ₅₀) is typically 2-10 µg/mL in the presence of 25 ng/mL Recombinant Mouse CCL19/MIP-3β.	

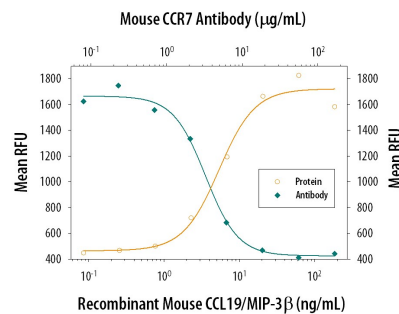
DATA

Immunocytochemistry



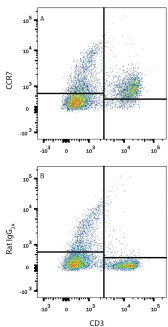
CCR7 in Mouse Splenocytes. CCR7 was detected in immersion fixed non-stimulated mouse splenocytes using 25 µg/mL Rat Anti-Mouse CCR7 Monoclonal Antibody (Catalog # MAB3477) for 3 hours at room temperature. Cells were stained (red) and counterstained (green). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

Neutralization



Chemotaxis Induced by CCL19/MIP-3β and Neutralization by Mouse CCR7 Antibody. Recombinant Mouse CCL19/MIP-3β (Catalog # 440-M3) chemoattracts the BaF3 mouse pro-B cell line transfected with mouse CCR7 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 Mouse CCL19/MIP-3β (25 ng/mL) is neutralized (green line) by increasing concentrations of Rat Anti-Mouse CCR7 Monoclonal Antibody (Catalog # MAB3477). The ND₅₀ is typically 2-10 µg/mL.

Flow Cytometry



Detection of CCR7 in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stained with Rat Anti-Mouse CD3 PE-conjugated Monoclonal Antibody (Catalog # FAB4841P) and either (A) Rat Anti-Mouse CCR7 Monoclonal Antibody (Catalog # MAB3477) or (B) Rat IgG_{2A} Isotype Control (Catalog # MAB006) followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113). View our protocol for [Staining Membrane-associated Proteins](#).

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.

- 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

CCR7 is a 7TM G protein coupled chemokine receptor. CCR7 is expressed on T cells and mature dendritic cells and transduces chemotactic signals in response to CCL19 and CCL21. Mouse CCR7 shares 87% amino acid sequence identity with human CCR7.