**DESCRIPTION**

Species Reactivity  
Human  

Specificity  
Detects human CCR7.

Source  
Recombinant Monoclonal Mouse IgG2A Clone # 150503R

Purification  
Protein A or G purified from cell culture supernatant

Immunogen  
Human CCR7 transfectants  
Met1-Pro378  
Accession # AAA58615

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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>0.25 μg/10^6 cells</td>
<td>See Below</td>
</tr>
<tr>
<td>CyTOF-ready</td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
<td></td>
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</tbody>
</table>

Neutralization  
Measured by its ability to neutralize CCL19/MIP-3β-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR7. The Neutralization Dose (ND<sub>50</sub>) is typically 1-5 μg/mL in the presence of 50 ng/mL Recombinant Human CCL19/MIP-3β.

**DATA**

**Flow Cytometry**

Detection of CCR7 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with PE-conjugated Mouse anti-Human CD4 Monoclonal Antibody (Catalog # FAB3791P) and either (A) Mouse anti-Human CCR7 Monoclonal Antibody (Catalog # MAB197R) or (B) Mouse IgG2A isotype control antibody (Catalog # MAB003) followed by APC-conjugated anti-mouse IgG secondary antibody (Catalog # F0101B). View our protocol for Staining Membrane-associated Proteins.

**Neutralization**

Chemotaxis Induced by CCL19/MIP-3β and Neutralization by Human CCR7 Antibody. Recombinant Human CCL19/MIP-3β (Catalog # 361-MI) chemotacts the BaF3 mouse pro-B cell line transfected with human 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 Human CCL19/MIP-3β (50 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human CCR7 Monoclonal Antibody (Catalog # MAB197R). The ND<sub>50</sub> is typically 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.

- 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 7 transmembrane 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. Human CCR7 shares 87% amino acid sequence identity with mouse CCR7.