**Species Reactivity**
Mouse

**Specificity**
Detects CXCR7/RDC-1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse CXCR5 is observed.

**Source**
Polyclonal Sheep IgG

**Purification**
Antigen Affinity-purified

**Immunogen**
Mouse myeloma cell line NS0-derived recombinant mouse CXCR7 extracellular N-terminus and loops Met1-Leu47, Ser103-Lys118, Lys184-Glu213, and Leu274-Ala296

**Accession #**
P56485

**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>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>2.5 μg/10⁶ cells</td>
<td>See Below</td>
</tr>
</tbody>
</table>

**CyTOF-ready**
Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

**DATA**

**Western Blot**
Detection of Mouse CXCR7/RDC-1 by Western Blot. Western blot shows lysates of mouse spleen tissue. PVDF Membrane was probed with 1 μg/mL of Mouse CXCR7/RDC-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4227) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CXCR7/RDC-1 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

**Flow Cytometry**
Detection of CXCR7/RDC-1 in Mouse Neural Progenitor Cells by Flow Cytometry. Undifferentiated mouse neural progenitor cells were stained with Sheep Anti-Mouse CXCR7/RDC-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4227, filled histogram) or control antibody (Catalog # 5-001-A, open histogram), followed by NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # NL010).

**PREPARATION AND STORAGE**

**Reconstitution**
Reconstitute at 0.2 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**

CXCR7 (CXC chemokine receptor 7; also GPRN1, RDC1 and chemokine orphan receptor 1) is a 60 kDa member of the G-protein coupled receptor 1 family. It is expressed on multiple cell types, including neurons, T cells, NK cells, neutrophils, B cells plus angiogenic endothelial cells. CXCR7 forms both homodimers and heterodimers with CXCR4. It selectively binds I-TAC and SDF1, and appears to involve β-arrestin2 during signaling. Notably, a CXCR7:CXCR4 heterodimer shows increased responsiveness to SDF1, and I-TAC may actually block some SDF1-mediated migration activity. Mouse CXCR7 is a 7-transmembrane glycoprotein that is 362 amino acids (aa) in length. It contains a 47 aa N-terminal extracellular region plus a 43 aa C-terminal cytoplasmic domain. Over aa 1-47, 103-118, 184-213 and 274-296 collectively, mouse CXCR7 shares 97% and 91% aa identity with rat and human CXCR7, respectively.