

DESCRIPTION

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 as a 0.2 µm filtered solution in PBS.

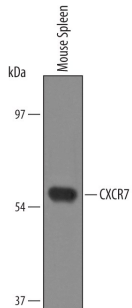
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

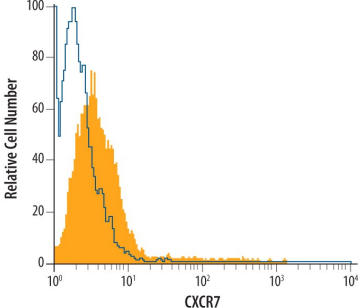
DATA

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. <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

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.