

**Anti-CXCR7 ACKR3 Rabbit Monoclonal Antibody**  
Catalog # ABO13664**Specification****Anti-CXCR7 ACKR3 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	<a href="#">P25106</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-CXCR7 ACKR3 Rabbit Monoclonal Antibody . Tested in WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-CXCR7 ACKR3 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 57007

**Other Names**

Atypical chemokine receptor 3, C-X-C chemokine receptor type 7, CXC-R7, CXCR-7, Chemokine orphan receptor 1, G-protein coupled receptor 159, G-protein coupled receptor RDC1 homolog, RDC-1, ACKR3 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=23692](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=23692))  
target="\_blank">HGNC:23692</a>)

**Calculated MW**

41493 MW KDa

**Application Details**

WB 1:500-1:2000<br>FC 1:50

**Subcellular Localization**

Cell membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region. Early endosome. Recycling endosome. Predominantly localizes to endocytic vesicles, and upon stimulation by the ligand is internalized via clathrin-coated pits in a beta-arrestin-dependent manner. Once internalized, the ligand dissociates from the receptor, and is targeted to degradation while the receptor is recycled back to the cell membrane.

**Tissue Specificity**

Expressed in monocytes, basophils, B-cells, umbilical vein endothelial cells (HUVEC) and B-lymphoblastoid cells. Lower expression detected in CD4+ T-lymphocytes and natural killer cells. In the brain, detected in endothelial cells and capillaries, and in mature neurons of the frontal cortex and hippocampus. Expressed in tubular formation in the kidney. Highly expressed in astroglial tumor endothelial, microglial and glioma cells. Expressed at low levels in normal CD34+ progenitor cells, but at very high levels in several myeloid malignant cell lines. Expressed in breast carcinomas but not in normal breast tissue (at protein level)..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

### Immunogen

A synthesized peptide derived from human CXCR7

### Purification

Affinity-chromatography

### Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## Anti-CXCR7 ACKR3 Rabbit Monoclonal Antibody - Protein Information

Name ACKR3 ([HGNC:23692](#))

### Function

Atypical chemokine receptor that controls chemokine levels and localization via high-affinity chemokine binding that is uncoupled from classic ligand-driven signal transduction cascades, resulting instead in chemokine sequestration, degradation, or transcytosis. Also known as interceptor (internalizing receptor) or chemokine-scavenging receptor or chemokine decoy receptor. Acts as a receptor for chemokines CXCL11 and CXCL12/SDF1 (PubMed: <a href="http://www.uniprot.org/citations/16107333" target="\_blank">16107333</a>, PubMed: <a href="http://www.uniprot.org/citations/19255243" target="\_blank">19255243</a>, PubMed: <a href="http://www.uniprot.org/citations/19380869" target="\_blank">19380869</a>, PubMed: <a href="http://www.uniprot.org/citations/20161793" target="\_blank">20161793</a>, PubMed: <a href="http://www.uniprot.org/citations/22300987" target="\_blank">22300987</a>). Chemokine binding does not activate G-protein-mediated signal transduction but instead induces beta-arrestin recruitment, leading to ligand internalization and activation of MAPK signaling pathway (PubMed: <a href="http://www.uniprot.org/citations/16940167" target="\_blank">16940167</a>, PubMed: <a href="http://www.uniprot.org/citations/18653785" target="\_blank">18653785</a>, PubMed: <a href="http://www.uniprot.org/citations/20018651" target="\_blank">20018651</a>). Required for regulation of CXCR4 protein levels in migrating interneurons, thereby adapting their chemokine responsiveness (PubMed: <a href="http://www.uniprot.org/citations/16940167" target="\_blank">16940167</a>, PubMed: <a href="http://www.uniprot.org/citations/18653785" target="\_blank">18653785</a>). In glioma cells, transduces signals via MEK/ERK pathway, mediating resistance to apoptosis. Promotes cell growth and survival (PubMed: <a href="http://www.uniprot.org/citations/16940167" target="\_blank">16940167</a>, PubMed: <a href="http://www.uniprot.org/citations/20388803" target="\_blank">20388803</a>). Not involved in cell migration, adhesion or proliferation of normal hematopoietic progenitors but activated by CXCL11 in malignant hematopoietic cells, leading to phosphorylation of ERK1/2 (MAPK3/MAPK1) and enhanced cell adhesion and migration (PubMed: <a href="http://www.uniprot.org/citations/17804806" target="\_blank">17804806</a>, PubMed: <a href="http://www.uniprot.org/citations/18653785" target="\_blank">18653785</a>, PubMed: <a href="http://www.uniprot.org/citations/19641136" target="\_blank">19641136</a>, PubMed: <a href="http://www.uniprot.org/citations/20887389" target="\_blank">20887389</a>). Plays a regulatory role in CXCR4-mediated activation of cell surface integrins by CXCL12 (PubMed: <a href="http://www.uniprot.org/citations/18653785" target="\_blank">18653785</a>). Required for heart valve development (PubMed: <a href="http://www.uniprot.org/citations/17804806" target="\_blank">17804806</a>). Regulates axon guidance in the oculomotor system through the regulation of CXCL12 levels (PubMed: <a href="http://www.uniprot.org/citations/31211835" target="\_blank">31211835</a>).

### Cellular Location

Cell membrane; Multi-pass membrane protein. Early endosome. Recycling endosome.  
Note=Predominantly localizes to endocytic vesicles, and upon stimulation by the ligand is internalized via clathrin-coated pits in a beta-arrestin-dependent manner. Once internalized, the ligand dissociates from the receptor, and is targeted to degradation while the receptor is recycled back to the cell membrane.

#### Tissue Location

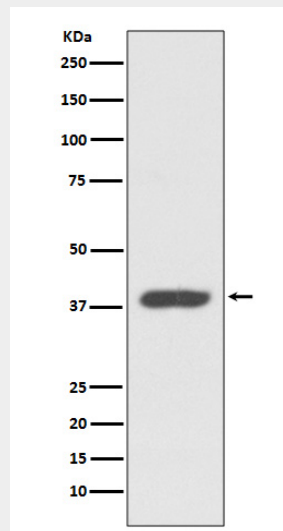
Expressed in monocytes, basophils, B-cells, umbilical vein endothelial cells (HUVEC) and B-lymphoblastoid cells. Lower expression detected in CD4+ T-lymphocytes and natural killer cells. In the brain, detected in endothelial cells and capillaries, and in mature neurons of the frontal cortex and hippocampus. Expressed in tubular formation in the kidney. Highly expressed in astroglial tumor endothelial, microglial and glioma cells. Expressed at low levels in normal CD34+ progenitor cells, but at very high levels in several myeloid malignant cell lines. Expressed in breast carcinomas but not in normal breast tissue (at protein level).

#### Anti-CXCR7 ACKR3 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-CXCR7 ACKR3 Rabbit Monoclonal Antibody - Images



Western blot analysis of CXCR7 expression in K562 cell lysate.