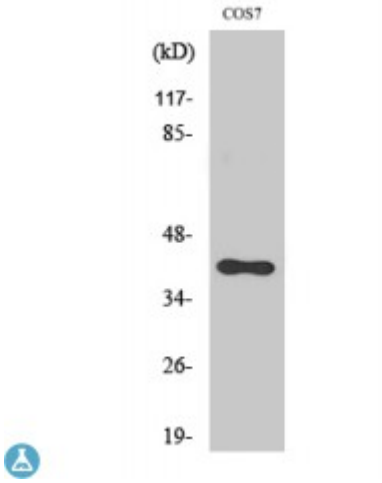
Anti-CXCR-7 antibody



Description	Rabbit polyclonal to CXCR-7.

Model	STJ92527
Host	Rabbit
Reactivity	Human, Mouse, Rat, Simian
Applications	ELISA, IF, WB
Immunogen	Synthesized peptide derived from human CXCR-7
Immunogen Region	290-370 aa, C-terminal
Gene ID	57007
Gene Symbol	ACKR3
Dilution range	WB 1:500-1:2000IF 1:200-1:1000ELISA 1:20000
Specificity	CXCR-7 Polyclonal Antibody detects endogenous levels of CXCR-7 protein.
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 le
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).

Protein Name	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
Molecular Weight	41 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:23692OMIM:610376
Alternative 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
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. 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. Required for regulation of CXCR4 protein levels in migrating interneurons, thereby adapting their chemokine responsiveness. In glioma cells, transduces signals via MEK/ERK pathway, mediating resistance to apoptosis. Promotes cell growth and survival. Not involved in cell migration, adhesion or proliferation of normal hematopoietic progenitors but activated by CXCL11 in malignant hemapoietic cells, leading to phosphorylation of ERK1/2 (MAPK3/MAPK1) and enhanced cell adhesion and migration. Plays a regulatory role in CXCR4-mediated activation of cell surface integrins by CXCL12. Required for heart valve development. Acts as coreceptor with CXCR4 for a restricted number of HIV isolates.
Sequence and Domain Family	The C-terminal cytoplasmic tail, plays a key role in: correct trafficking to the cell membrane, recruitment of beta-arrestin, ubiquitination, and in chemokine scavenging and signaling functions. The Ser/Thr residues and the Lys residues in the C-terminal cytoplasmic tail are essential for beta-arrestin recruitment and ubiquitination respectively.
Cellular 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.
Post-translational Modifications	The Ser/Thr residues in the C-terminal cytoplasmic tail may be phosphorylated.; Ubiquitinated at the Lys residues in its C-terminal

cytoplasmic tail and is essential for correct trafficking from and to the cell membrane. Deubiquitinated by CXCL12-stimulation in a reversible manner.