



Rabbit Anti-GPCR RDC1/CXCR7 antibody

SL15371R

Product Name:	GPCR RDC1/CXCR7
Chinese Name:	G protein-coupled receptorRDC1蛋白抗体
Alias:	C-X-C chemokine receptor type 7; Chemokine orphan receptor 1; CMKOR1; CXC-R7; CXCR-7; CXCR7; G-protein coupled receptor 159; G-protein coupled receptor RDC1 homolog; GPR159; RDC-1; RDC1; CXCR7_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GPCR RDC1:151-250/362<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a member of the G-protein coupled receptor family. Although this protein was earlier thought to be a receptor for vasoactive intestinal peptide (VIP), it is now considered to be an orphan receptor, in that its endogenous ligand has not been identified. The protein is also a coreceptor for human immunodeficiency viruses (HIV).

Translocations involving this gene and HMGA2 on chromosome 12 have been observed in lipomas. [provided by RefSeq, Jul 2008]

Function:

Receptor for chemokines CXCL12/SDF1 and CXCL11. Does not elicit classical chemokine receptor signaling; 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. Acts as a scavenger for CXCL12/SDF1 and, to a lesser extent, for CXCL11. 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 hematopoietic 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.

Subunit:

Homodimer. Can form heterodimers with CXCR4; heterodimerization may regulate CXCR4 signaling activity.

Subcellular Location:

Cell membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region. Early endosome. Recycling endosome (By similarity). Note=Localized mainly in perinuclear regions in neurons and in early endosomes in T-lymphocytes and some other cell types, with very low levels detected on the cell surface. May spontaneously cycle between the plasma membrane and endosomal compartments.

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).

Similarity:

Belongs to the G-protein coupled receptor 1 family.

SWISS:

P25106

Gene ID:
57007

Database links:

[Entrez Gene: 57007](#) Human

[Entrez Gene: 12778](#) Mouse

[Entrez Gene: 84348](#) Rat

[Omim: 610376](#) Human

[SwissProt: P25106](#) Human

[SwissProt: P56485](#) Mouse

[SwissProt: O89039](#) Rat

[Unigene: 471751](#) Human

[Unigene: 6522](#) Mouse

[Unigene: 12959](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.