Anti-Chemokine Receptor D6 antibody

Description	Rabbit polyclonal to Chemokine Receptor D6.

Model	STJ92260
Host	Rabbit
Reactivity	Human
Applications	ELISA, IF
Immunogen	Synthesized peptide derived from human Chemokine Receptor D6
Immunogen Region	310-390 aa, C-terminal
Gene ID	1238
Gene Symbol	ACKR2
Dilution range	IF 1:200-1:1000ELISA 1:20000
Specificity	Chemokine Receptor D6 Polyclonal Antibody detects endogenous levels of Chemokine Receptor D6 protein.
Tissue Specificity	Found in endothelial cells lining afferent lymphatics in dermis and lymph nodes. Also found in lymph nodes subcapsular and medullary sinuses, tonsillar lymphatic sinuses and lymphatics in mucosa and submucosa of small and large intestine and appendix. Also found in some malignant vascular tumors. Expressed at high levels in Kaposi sarcoma-related pathologies. Expressed on apoptotic neutrophils (at protein level). Expressed primarily in placenta and fetal liver, and found at very low levels in the lung and
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 2 C-C chemokine receptor D6 Chemokine receptor CCR-10 Chemokine receptor CCR-9 Chemokine-binding protein 2 Chemokine-binding protein D6
Molecular Weight	34 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:1565OMIM:602648
Alternative Names	Atypical chemokine receptor 2 C-C chemokine receptor D6 Chemokine receptor CCR-10 Chemokine receptor CCR-9 Chemokine-binding protein 2 Chemokine-binding protein D6
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 including CCL2, CCL3, CCL3L1, CCL4, CCL5, CCL7, CCL8, CCL11, CCL13, CCL17, CCL22, CCL23, CCL24, SCYA2/MCP-1, SCY3/MIP-1-alpha, SCYA5/RANTES and SCYA7/MCP-3. Upon active ligand stimulation, activates a beta-arrestin 1 (ARRB1)-dependent, G protein-independent signaling pathway that results in the phosphorylation of the actin-binding protein cofilin (CFL1) through a RAC1-PAK1-LIMK1 signaling pathway. Activation of this pathway results in up-regulation of ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation. By scavenging chemokines in tissues, on the surfaces of lymphatic vessels, and in placenta, plays an essential role in the resolution (termination) of the inflammatory response and in the regulation of adaptive immune responses. Plays a major role in the immune silencing of macrophages during the resolution of inflammation. Acts as a regulator of inflammatory leukocyte interactions with lymphatic endothelial cells (LECs) and is required for immature/mature dendritic cells discrimination by LECs.
Sequence and Domain Family	The C-terminal cytoplasmic tail controls its phosphorylation, stability, intracellular trafficking itinerary, and chemokine scavenging properties.
Cellular Localization	Early endosome. Recycling endosome. Cell membrane. Multi-pass membrane protein. Predominantly localizes to endocytic vesicles, and upon stimulation by the ligand is internalized via clathrin-coated pits. 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	Phosphorylated on serine residues in the C-terminal cytoplasmic tail.

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