

**Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP2012b****Specification**

---

**Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide - Product Information**Primary Accession  
Other Accession[O00590](#)  
[NP\\_001287](#)**Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 1238**Other 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, ACKR2, CCBP2, CCR10, CMKBR9, D6

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP2012b](/product/products/AP2012b) was selected from the C-term region of human CCBP2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide - Protein Information****Name** ACKR2**Synonyms** CCBP2, CCR10, CMKBR9, 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.

#### **Cellular Location**

Early endosome. Recycling endosome. Cell membrane; Multi-pass membrane protein. Note=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

#### **Tissue Location**

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 lymph node.

### **Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide - Images**

### **Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide - Background**

CCBP2 is a beta chemokine receptor, which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. Chemokines and their receptor-mediated signal transduction are critical for the recruitment of effector immune cells to the inflammation site. This gene is expressed in a range of tissues and hemopoietic cells. The expression of this receptor in lymphatic endothelial cells and overexpression in vascular tumors suggested its function in chemokine-driven recirculation of leukocytes and possible chemokine effects on the development and growth of vascular tumors. This receptor appears to bind the majority of beta-chemokine family members; however, its specific function remains unknown. This gene is mapped to chromosome 3p21.3, a region that includes a cluster of chemokine receptor genes.

### **Chemokine Receptor D6 (CCBP2) Antibody (C-term) Blocking peptide - References**

Kunkel, E.J., et al., J. Clin. Invest. 111(7):1001-1010 (2003). Fra, A.M., et al., J. Immunol. 170(5):2279-2282 (2003). Soler, D., et al., Blood 101(5):1677-1682 (2003). Nibbs, R.J., et al., Am. J. Pathol. 158(3):867-877 (2001). Bonini, J.A., et al., DNA Cell Biol. 16(10):1249-1256 (1997).