

CXCR3 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10170c**Specification**

CXCR3 Antibody (Center) Blocking peptide - Product Information

Primary Accession [P49682](#)
Other Accession [NP_001495.1](#), [NP_001136269.1](#)

CXCR3 Antibody (Center) Blocking peptide - Additional Information

Gene ID 2833

Other Names

C-X-C chemokine receptor type 3, CXCR-3, CXCR-3, CKR-L2, G protein-coupled receptor 9, Interferon-inducible protein 10 receptor, IP-10 receptor, CD183, CXCR3, GPR9

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.

CXCR3 Antibody (Center) Blocking peptide - Protein Information

Name CXCR3

Synonyms GPR9

Function

[Isoform 1]: Receptor for the C-X-C chemokine CXCL9, CXCL10 and CXCL11 and mediates the proliferation, survival and angiogenic activity of human mesangial cells (HMC) through a heterotrimeric G- protein signaling pathway (PubMed:12782716). Binds to CCL21. Probably promotes cell chemotaxis response. [Isoform 3]: Mediates the activity of CXCL11.

Cellular Location

[Isoform 1]: Cell membrane; Multi-pass membrane protein

Tissue Location

Isoform 1 and isoform 2 are mainly expressed in heart, kidney, liver and skeletal muscle. Isoform 1 is also expressed in placenta. Isoform 2 is expressed in endothelial cells. Expressed in T-cells (at protein level).

CXCR3 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

CXCR3 Antibody (Center) Blocking peptide - Images

CXCR3 Antibody (Center) Blocking peptide - Background

This gene encodes a G protein-coupled receptor with selectivity for three chemokines, termed IP10(interferon-g-inducible 10 kDa protein), Mig (monokine induced by interferon-g) and I-TAC (interferon-inducible T cell chemoattractant). IP10, Mig and I-TAC belong to the structural subfamily of CXC chemokines, in which a single amino acid residue separates the first two of four highly conserved Cys residues. Binding of chemokines to this protein induces cellular responses that are involved in leukocyte traffic, most notably integrin activation, cytoskeletal changes and chemotactic migration. Inhibition by Bordetella pertussis toxin suggests that the heterotrimeric G protein of the Gi-subclass couple to this protein. Signal transduction has not been further analyzed but may include the same enzymes that were identified in the signaling cascade induced by other chemokine receptors. As a consequence of chemokine-induced cellular desensitization (phosphorylation-dependent receptor internalization), cellular responses are typically rapid and short in duration. Cellular responsiveness is restored after dephosphorylation of intracellular receptors and subsequent recycling to the cell surface. This gene is prominently expressed in in vitro cultured effector/memory T cells, and in T cells present in many types of inflamed tissues. In addition, IP10, Mig and I-TAC are commonly produced by local cells in inflammatory lesion, suggesting that this gene and its chemokines participate in the recruitment of inflammatory cells. Therefore, this protein is a target for the development of small molecular weight antagonists, which may be used in the treatment of diverse inflammatory diseases. Multiple transcript variants encoding different isoforms have been found for this gene.

CXCR3 Antibody (Center) Blocking peptide - References

Zhou, J., et al. J. Exp. Med. 207(9):1951-1966(2010) Wang, Y., et al. J. Hum. Genet. 55(8):490-494(2010) Schuurhof, A., et al. Pediatr. Pulmonol. 45(6):608-613(2010) Miekus, K., et al. Folia Histochem. Cytobiol. 48(1):104-111(2010) Ohri, C.M., et al. BMC Cancer 10, 172 (2010) :