

CXCR3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP10170c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P49682
Other Accession	NP_001495.1 , NP_001136269.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23384
Calculated MW	40660
Antigen Region	140-167

Additional Information

Gene ID	2833
Other Names	C-X-C chemokine receptor type 3, CXC-R3, CXCR-3, CKR-L2, G protein-coupled receptor 9, Interferon-inducible protein 10 receptor, IP-10 receptor, CD183, CXCR3, GPR9
Target/Specificity	This CXCR3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-167 amino acids of human CXCR3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CXCR3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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. Upon activation by PF4, induces activated T-lymphocytes migration mediated via downstream Ras/extracellular signal-regulated kinase (ERK) signaling. [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).

Background

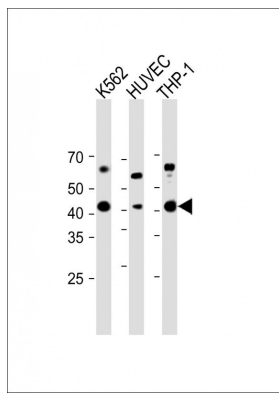
This gene encodes a G protein-coupled receptor with selectivity for three chemokines, termed IP10 (interferon-g-inducible 10 kDa protein), Mig (monokine induced by interferon-g) and I-TAC (interferon-inducible T cell a-chemoattractant). IP10, Mig and I-TAC belong to the structural subfamily of CXC chemokines, 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 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.

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) :

Images

All lanes : Anti-IL4 Antibody (C-term) at 1:1000 dilution
Lane 1: K562 whole cell lysate Lane 2: HUVEC whole cell lysate Lane 3: THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 40kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.