10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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
Predicted	Bovine, Canine, Rabbit
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 chemokines 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). Probably promotes cell chemotaxis response. Upon activation by PF4, induces activated T- lymphocyte 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

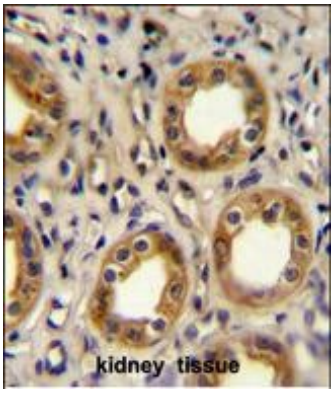
This gene encodes a G protein-coupled receptor with selectivity for three chemokines, termed IP10 (interferon-g-inducible 10 kDa protein), Mig (monokine induced by interferon-g) and I-TAC (interferon-inducible T cell a-chemoattractant). IP10, Mig and I-TAC belong to the structural subfamily of CXC chemokines,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

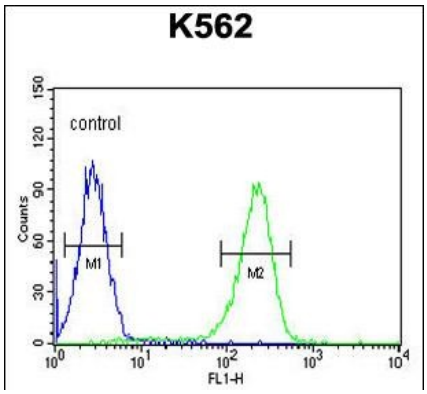
References

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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

CXCR3 Antibody (Center) (Cat. #AP10170c) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CXCR3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.





CXCR3 Antibody (Center) (Cat. #AP10170c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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