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CXCR3 Antibody

Catalog # ASC11749

Product Information

Application	WB, IF, ICC, E
Primary Accession	P49682
Other Accession	NP_001136269, 218563730
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	40660
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CXCR3 antibody can be used for detection of CXCR3 by Western blot at 1 - 2 g/ml. Antibody can also be used for Immunocytochemistry at 5 g/mL. For Immunoflorescence start at 20 g/mL.

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	CXCR3; CXCR3 antibody is human, mouse and rat reactive. At least two isoforms of CXCR3 are known to exist; this antibody will detect both isoforms.
Reconstitution & Storage	CXCR3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	CXCR3 Antibody 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).

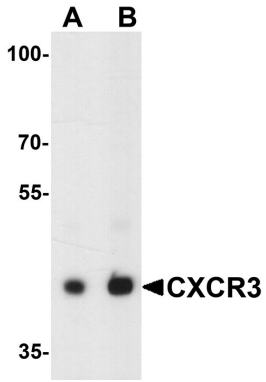
Background

The CXCR3 protein is a G protein-coupled receptor with selectivity for three chemokines, termed CXCL9/Mig (monokine induced by interferon-gamma), CXCL10/IP10 (interferon-gamma-inducible 10 kDa protein) and CXCL11/I-TAC (interferon-inducible T cell alpha-chemoattractant) (reviewed in 1). Binding of chemokines to this protein induces cellular responses that are involved in leukocyte traffic, most notably integrin activation, cytoskeletal changes and chemotactic migration (2). Similar to other chemokine receptors such as CXCR4, CXCR3 has been implicated in several malignancies as a biomarker of tumor behavior as well as a potential therapeutic target (3).

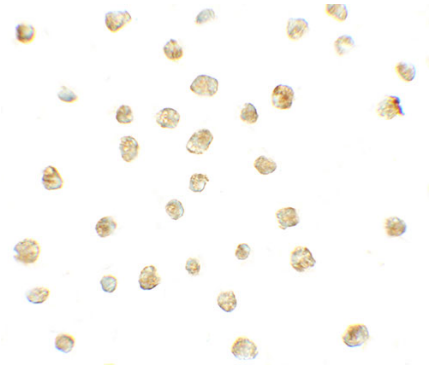
References

Groom JR and Luster AD. CXCR3 ligands: redundant, collaborative and antagonistic functions. Immunol. Cell Biol. 2011; 89:207-15.
Maghazachi AA. Role of chemokines in the biology of natural killer cells. Curr. Top Microbiol. Immunol. 2010; 341:37-58.
Fulton AM. The chemokine receptors CXCR4 and CXCR3 in cancer. Curr. Oncol. Rep. 2009; 11:125-31.

Images

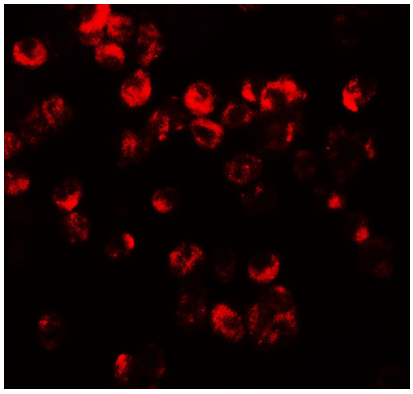


Western blot analysis of CXCR3 in HepG2 lysate with CXCR3 antibody at (A) 1 and (B) 2 µg/ml.



Immunocytochemistry of CXCR3 in HepG2 cells with CXCR3 antibody at 5 µg/mL.

Immunofluorescence of CXCR3 in HepG2 cells with CXCR3 antibody at 20 µg/mL.



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