

CXCR3 Antibody

Catalog # ASC11749

Specification

CXCR3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, IF, ICC, E <u>P49682</u> <u>NP_001136269</u>, <u>218563730</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 46 kDa

Observed: 43 kDa KDa CXCR3 antibody can be used for detection of CXCR3 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunocytochemistry at 5 µg/mL. For Immunoflorescence start at 20 µg/mL.

Application Notes

CXCR3 Antibody - Additional Information

Gene ID 2833 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.

CXCR3 Antibody - 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).

CXCR3 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CXCR3 Antibody - Images



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

CXCR3 Antibody - 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).

CXCR3 Antibody - 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.