

CXCR4 Antibody

Rabbit mAb Catalog # AP90416

## Specification

# CXCR4 Antibody - Product Information

ApplicationWB, IHC, ICCPrimary AccessionP61073ClonalityMonoclonalOther NamesCD184 ; CXCR4; C-X-C chemokine receptor type 4; FB22; Fusin; HM89; LCR1; LESTR; NPYRL; SDF-1receptor; Stromal cell- derived factor 1 receptor;

WB~~1:1000

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	39746 Da

## **CXCR4 Antibody - Additional Information**

Dilution

	IHC~~1:100~500
	ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CXCR4
Description	Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ions levels and enhancing MAPK1/MAPK3 activation. Acts as a receptor for extracellular ubiquitin; leading to enhance intracellular calcium ions and reduce cellular cAMP levels. Involved in haematopoiesis and in cardiac ventricular septum formation. Plays also an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells. Could be involved in
Storage Condition and Buffer	cerebellar development. Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

# CXCR4 Antibody - Protein Information

Name CXCR4



### Function

Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation (PubMed:<a href="http://www.uniprot.org/citations/10452968" target="\_blank">10452968</a>, PubMed:<a href="http://www.uniprot.org/citations/18799424" target=" blank">18799424</a>, PubMed:<a href="http://www.uniprot.org/citations/24912431" target=" blank">24912431</a>, PubMed:<a href="http://www.uniprot.org/citations/28978524" target=" blank">28978524</a>). Involved in the AKT signaling cascade (PubMed: <a href="http://www.uniprot.org/citations/24912431" target=" blank">24912431</a>). Plays a role in regulation of cell migration, e.g. during wound healing (PubMed: <a href="http://www.uniprot.org/citations/28978524" target=" blank">28978524</a>). Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels (PubMed:<a href="http://www.uniprot.org/citations/20228059" target=" blank">20228059</a>). Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:<a href="http://www.uniprot.org/citations/11276205" target=" blank">11276205</a>). Involved in hematopoiesis and in cardiac ventricular septum formation. Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells. Involved in cerebellar development. In the CNS, could mediate hippocampal-neuron survival (By similarity).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Cell junction. Early endosome. Late endosome. Lysosome. Note=In unstimulated cells, diffuse pattern on plasma membrane. On agonist stimulation, colocalizes with ITCH at the plasma membrane where it becomes ubiquitinated. In the presence of antigen, distributes to the immunological synapse forming at the T- cell-APC contact area, where it localizes at the peripheral and distal supramolecular activation cluster (SMAC)

### **Tissue Location**

Expressed in numerous tissues, such as peripheral blood leukocytes, spleen, thymus, spinal cord, heart, placenta, lung, liver, skeletal muscle, kidney, pancreas, cerebellum, cerebral cortex and medulla (in microglia as well as in astrocytes), brain microvascular, coronary artery and umbilical cord endothelial cells lsoform 1 is predominant in all tissues tested

# **CXCR4 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>

#### CXCR4 Antibody - Images





Western blot analysis of CXCR4 expression in Jurkat cell lysate.