

# **CXCR4 Antibody**

Rabbit mAb Catalog # AP90416

### **Product Information**

**Application** WB, IHC, IF, ICC, IHF

Primary Accession P61073

Reactivity Human, Mouse Clonality Monoclonal

Other Names CD184; CXCR4; C-X-C chemokine receptor type 4; FB22; Fusin; HM89; LCR1;

LESTR; NPYRL; SDF-1 receptor; Stromal cell- derived factor 1 receptor;

IsotypeRabbit IgGHostRabbitCalculated MW39746

#### **Additional Information**

**Dilution** WB 1:100~1:200 IHC 1:50~1:200 ICC/IF 1:50~1:200

**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 cerebellar development.

Storage Condition and Buffer 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.

#### **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:10452968, PubMed:18799424, PubMed:24912431,

PubMed: 28978524). Involved in the AKT signaling cascade

(PubMed:<u>24912431</u>). Plays a role in regulation of cell migration, e.g. during wound healing (PubMed:<u>28978524</u>). Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels (PubMed:<u>20228059</u>). Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:<u>11276205</u>). 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).

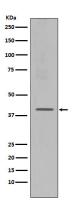
#### **Cellular Location**

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 Isoform 1 is predominant in all tissues tested

## **Images**



Western blot analysis of CXCR4 expression in Jurkat cell lysate.

Image not found: 202311/AP90416-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human cervical carcinoma, using CXCR4 Antibody.

Image not found: 202311/AP90416-IF.jpg

Immunofluorescent analysis of Jurkat cells, using CXCR4 Antibody .

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