

# CXCR4 Rabbit mAb

Catalog # AP76926

### **Product Information**

**Application** WB, IHC-P, IF, ICC

Primary Accession P61073

Reactivity Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human CXCR4

**Purification** Affinity Chromatography

Calculated MW 39746

## **Additional Information**

**Gene ID** 7852

Other Names CXCR4

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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

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