

CXCR4 Blocking Peptide
Catalog # PBV10490b**Specification**

CXCR4 Blocking Peptide - Product Information

Primary Accession	O08565
Gene ID	60628
Calculated MW	39429

CXCR4 Blocking Peptide - Additional Information**Gene ID** 60628**Application & Usage**

The peptide is used for blocking the antibody activity of CXCR4. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

C-X-C chemokine receptor type 4, CXC-R4, CXCR-4, Fusin, Leukocyte-derived seven transmembrane domain receptor, LESTR, Stromal cell-derived factor 1 receptor, SDF-1 receptor, CD184, Cxcr4, Cmkar4

Target/Specificity

CXCR4

Formulation

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

CXCR4 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

CXCR4 Blocking Peptide - Protein Information**Name** Cxcr4**Synonyms** Cmkar4**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. Involved in the AKT signaling cascade (By similarity). Plays a role in regulation of cell migration, e.g. during wound healing. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes (By similarity). 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 {ECO:0000250|UniProtKB:P61073}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P61073}. 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 (By similarity). 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) (By similarity).

CXCR4 Blocking Peptide - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CXCR4 Blocking Peptide - Images