

## Anti-CXCR4 Monoclonal Antibody Catalog # ABO14365

### Specification

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#### Anti-CXCR4 Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC
Primary Accession	<a href="#">P61073</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-CXCR4 Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse.

#### Anti-CXCR4 Monoclonal Antibody - Additional Information

Gene ID 7852

#### Other Names

C-X-C chemokine receptor type 4, CXC-R4, CXCR-4, FB22, Fusin, HM89, LCR1, Leukocyte-derived seven transmembrane domain receptor, LESTR, Lipopolysaccharide-associated protein 3, LAP-3, LPS-associated protein 3, NPYRL, Stromal cell-derived factor 1 receptor, SDF-1 receptor, CD184, CXCR4

#### Application Details

WB 1:100-1:200<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human CXCR4

#### Purification

Affinity-chromatography

#### Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

#### Anti-CXCR4 Monoclonal 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

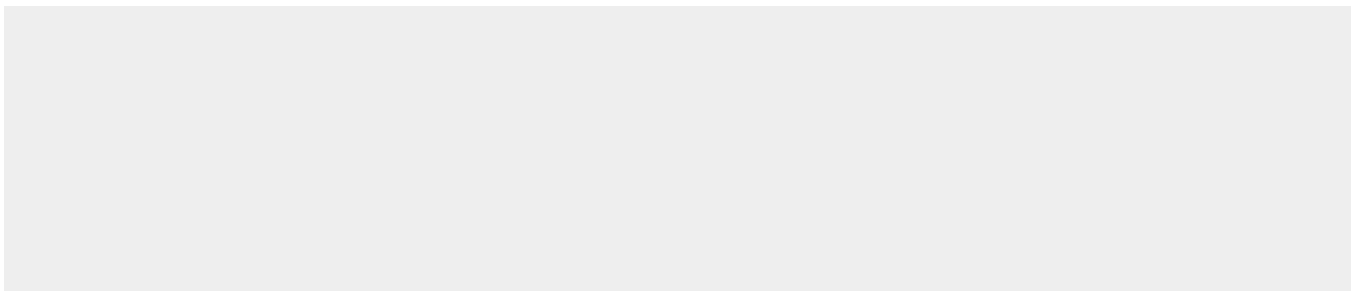
Expressed in numerous tissues, such as peripheral blood leukocytes, spleen, thymus, spinal cord, heart, placenta, lung, liver, skeletal muscle, kidney, pancreas, cerebellum, cerebral cortex and medulla (in microglia as well as in astrocytes), brain microvascular, coronary artery and umbilical cord endothelial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

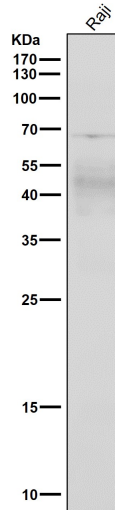
### Anti-CXCR4 Monoclonal Antibody - Protocols

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

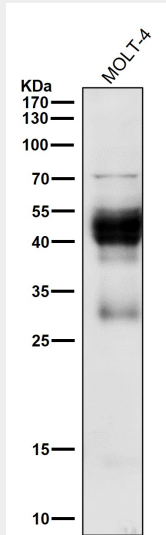
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-CXCR4 Monoclonal Antibody - Images

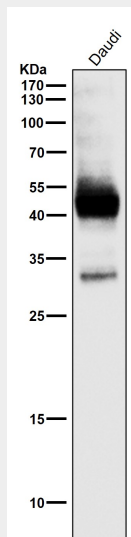




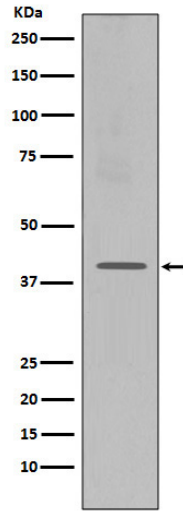
All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



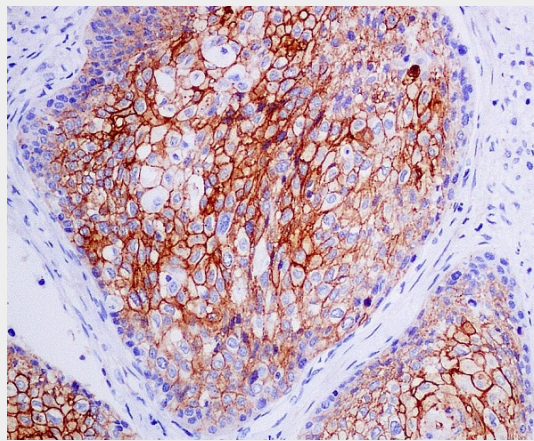
All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



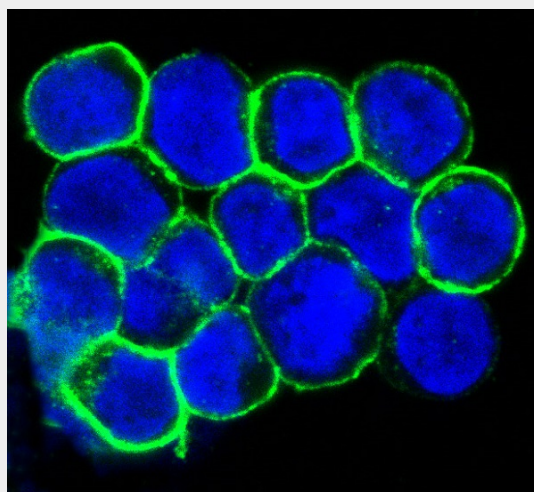
All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



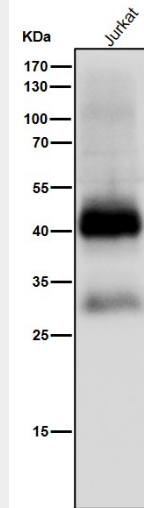
Western blot analysis of CXCR4 expression in Jurkat cell lysate.



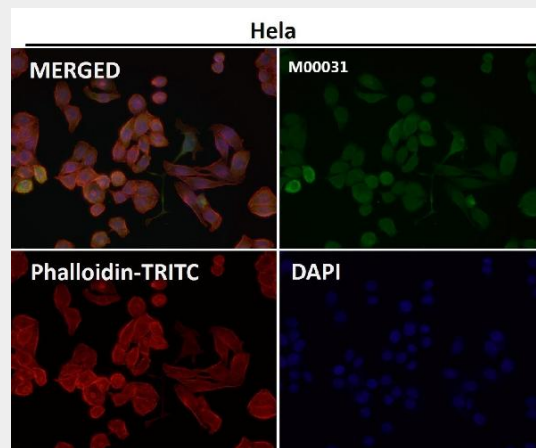
Immunohistochemical analysis of paraffin-embedded human cervical carcinoma, using CXCR4 Antibody.



Immunofluorescent analysis of Jurkat cells, using CXCR4 Antibody.



All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



Immunofluorescent analysis using the Antibody at 1:50 dilution.