CXCR4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CXCR4, Polyclonal Antibody
Full Product Name	CXCR4 Rabbit pAb
Product Gene Name	anti-CXCR4 antibody
Product Synonym Names	FB22; HM89; LAP3; LCR1; NPYR; WHIM; CD184; LAP-3; LESTR; NPY3R; NPYRL; WHIMS; HSY3RR; NPYY3R; D2S201E
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	PBS with 0.02% Sodium Azide, 50% Glycerol, pH 7.3.
Purity/Purification	Affinity Purified
Preparation and Storage	Store at -20 degree C. Avoid freeze/thaw cycles.
Molecular Weight	41kDa; 71kDa
OMIM	162643
3D Structure	ModBase 3D Structure for P61073
Immunogen	Recombinant protein of human CXCR4
Cellular Localization	Cell Junction, Cell Membrane, Endosome, Lysosome, Membrane
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CXCR4 antibody	Western Blot (WB), Immunofluorescence (IF)
Application Notes for anti-CXCR4 antibody	WB: 1:500-1:1000 IF: 1:50-1:100
Related Product Information for anti-CXCR4 antibody	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. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. 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.
Other Notes	Small volumes of anti-CXCR4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CXCR4 purchase	MBS8549171 is an antibody targeting CXCR4. Also known as CXCR4 Rabbit pAb. Reactive in Human, Mouse, Rat. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CXCR4. It may not necessarily be applicable to this product.

NCBI GI #	56790927

NCBI GeneID	7852
NCBI Accession #	NP_001008540.1
UniProt Primary Accession #	P61073
UniProt Related Accession #	P61073
GenBank Nucleotide #	NP_001008540.1
NCBI Official Full Name	C-X-C chemokine receptor type 4 isoform a
NCBI Official Synonym Full Names	C-X-C motif chemokine receptor 4
NCBI Official Symbol	CXCR4
NCBI Official Synonym Symbols	FB22; HM89; LAP3; LCR1; NPYR; WHIM; CD184; LAP-3; LESTR; NPY3R; NPYRL; WHIMS; HSY3RR; NPYY3R; D2S201E
UniProt Protein Name	C-X-C chemokine receptor type 4
UniProt Synonym Protein Names	FB22; Fusin; HM89; LCR1; Leukocyte-derived seven transmembrane domain receptor; LESTR; NPYRL; Stromal cell-derived factor 1 receptor
Protein Family	C-X-C chemokine receptor
UniProt Gene Name	CXCR4
UniProt Synonym Gene Names	CXC-R4; CXCR-4; LESTR
UniProt Entry Name	CXCR4_HUMAN
NCBI Protein Information	C-X-C chemokine receptor type 4
NCBI Summary for CXCR4	This gene encodes a CXC chemokine receptor specific for stromal cell-derived factor-1. The protein has 7 transmembrane regions and is located on the cell surface. It acts with the CD4 protein to support HIV entry into cells and is also highly expressed in breast cancer cells. Mutations in this gene have been associated with WHIM (warts, hypogammaglobulinemia, infections, and myelokathexis) syndrome. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

UniProt Comments for CXCR4	CXCR4: 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. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. 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. Acts as a coreceptor (CD4 being the primary receptor) for HIV-1 X4 isolates and as a primary receptor for some HIV-2 isolates. Promotes Env-mediated fusion of the virus. Monomer. Can form dimers. Interacts with CD164. Interacts with HIV-1 surface protein gp120 and Tat. Interacts with ARRB2; the interaction is dependent on the C-terminal phosphorylation of CXCR4 and allows activation of MAPK1 and MAPK3. Interacts with ARRC; the interaction is dependent on the C-terminal phosphorylation of CXCR4 and modulates calcium mobilization. Interacts (via the cytoplasmic C-terminal) with ITCH (via the WW domains I and II); the interaction, enhanced by CXCL12, ubiquitinates CXCR4 and leads to its degradation. Interacts with extracellular ubiquitin. Interacts with human cytomegalovirus/HHV- 5 protein UL78. 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. Belongs to the G-protein coupled receptor 1 family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; Membrane protein, multi-pass; GPCR, family 1; Receptor, GPCR Chromosomal Location of Human Ortholog: 2q21 Cellular Component: cell surface; lysosome; leading edge; early endosome; cytoplasmic membrane-bound vesicle; integral to membrane; intercellular junction; growth cone; cytoplasm; late endosome; plasma membrane; cytoplasmic vesicle; external side of plasma membrane Molecular Function: viral receptor activity; G-protein coupled receptor activity; protein binding; ubiquitin binding; ubiquitin protein ligase binding; cytokine binding; coreceptor activity; myosin light chain binding; actin binding; C-X-C chemokine receptor activity Biological Process: entry of virus into host cell; regulation of chemotaxis; viral reproduction; activation of MAPK activity; apoptosis; neuron migration; motor axon guidance; regulation of cell migration; germ cell development; T cell proliferation; elevation of cytosolic calcium ion concentration; germ cell migration; dendritic cell chemotaxis; positive regulation of oligodendrocyte differentiation; inflammatory response; neutrophil activation; response to virus; calcium-mediated signaling; patterning of blood vessels; G-protein coupled receptor protein signaling pathway; ameboidal cell migration; myelin maintenance; response to hypoxia; entry into host cell; brain development Disease: Whim Syndrome
Research Articles on CXCR4	**1.** Our results demonstrated that CXCR4 plays a non-developmental role in regulating cardiac function and that CXCR4 cKO mice develop a progressive cardiomyopathy leading to clinical heart failure.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/cxcr4/8549171