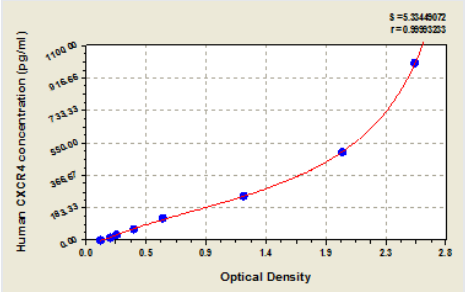
Chemokine (C-X-C Motif) Receptor 4 (CXCR4) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	chemokine (C-X-C motif) receptor 4 (CXCR4), ELISA Kit
Full Product Name	Human CXC-chemokine receptor 4, CXCR4 ELISA Kit
Product Gene Name	CXCR4 elisa kit
Product Synonym Names	Human CXC-chemokine receptor 4 (CXCR4) ELISA Kit; CD184; D2S201E; FB22; HM89; HSY3RR; LAP3; LCR1; LESTR; NPY3R; NPYR; NPYRL; NPYY3R; WHIM; C-X-C chemokine receptor type 4; CD184 antigen; fusin; leukocyte-derived seven-transmembrane-domain receptor; lip; chemokine (C-X-C motif) receptor 4
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Samples	Serum, plasma and tissue homogenates
Detection Range	15.6 pg/ml-1000 pg/ml
Sensitivity	< 3.9 pg/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of human CXCR4. No significant cross-reactivity or interference between human CXCR4 and analogues was observed.
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.
Inter-assay Precision	Inter-assay Precision (Precision between assays): CV%<10%. Three samples of known concentration were tested in twenty assays to assess.
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV%<8%. Three samples of known concentration were tested twenty times on one plate to assess.
Molecular Weight	39,746 Da
OMIM	gene 193670
3D Structure	ModBase 3D Structure for P61073
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for CXCR4 elisa kit	Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. Antibody specific for CXCR4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any CXCR4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for CXCR4 is added to the wells. After washing, avidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of CXCR4 bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of CXCR4 elisa kit 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	MBS701992 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the chemokine (C-X-C motif) receptor 4 (CXCR4) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CXCR4. The ELISA analytical biochemical technique of the MBS701992 kit is based on CXCR4 antibody-CXCR4 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CXCR4 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CXCR4. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of CXCR4 elisa kit

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 Secondary Accession #	O60835; P30991; P56438; Q53S69; Q9BXA0; Q9UKN2; B2R5N0
UniProt Related Accession #	P61073
GenBank Nucleotide #	NM_001008540.1
NCBI Official Full Name	C-X-C chemokine receptor type 4 isoform a
NCBI Official Synonym Full Names	chemokine (C-X-C motif) receptor 4
NCBI Official Symbol	CXCR4
NCBI Official Synonym Symbols	FB22; HM89; LAP3; LCR1; NPYR; WHIM; CD184; LAP-3; LESTR; NPY3R; NPYRL; 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; Lipopolysaccharide-associated protein 3; LAP-3; LPS-associated protein 3; NPYRL; Stromal cell-derived factor 1 receptor; SDF-1 receptor; CD_antigen: CD184
Protein Family	C-X-C chemokine receptor
UniProt Gene Name	CXCR4
UniProt Synonym Gene Names	CXC-R4; CXCR-4; LESTR; LAP-3; LPS-associated protein 3; SDF-1 receptor
UniProt Entry Name	CXCR4_HUMAN
NCBI Protein Information	C-X-C chemokine receptor type 4; fusin; CD184 antigen; SDF-1 receptor; LPS-associated protein 3; neuropeptide Y receptor Y3; seven transmembrane helix receptor; stromal cell-derived factor 1 receptor; lipopolysaccharide-associated protein 3; seven-transmembrane-segment receptor, spleen; leukocyte-derived seven transmembrane domain receptor
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	**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. 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. Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes.13 PublicationsManual assertion based on experiment in:Ref.1
Research Articles on CXCR4	**1.** Aberrant expression of CXCR4 significantly contributes to metastasis and predicts poor clinical outcome in breast cancer.
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