CX3C Chemokine Receptor 1 (CX3CR1) ELISA Kit for Human

PRODUCT OVERVIEW

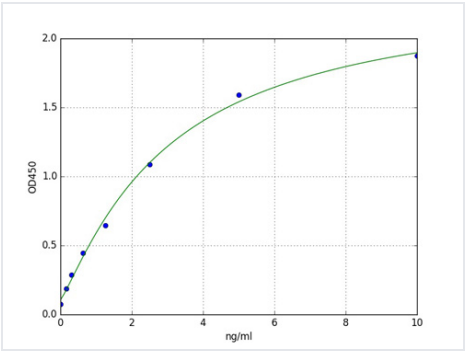
Product Name	CX3C chemokine receptor 1 (CX3CR1), ELISA Kit
Full Product Name	Human CX3C chemokine receptor 1 ELISA Kit
Product Gene Name	CX3CR1 elisa kit
Product Synonym Names	CX3CR1/CMKbRL1/V28/Beta chemokine receptor-like 1/chemokine (C-C) receptor-like 1/CMKBRL1/CMK-BRL1/CMK-BRL-1/CMKDR1/CX3C chemokine receptor 1/Fractalkine receptor/G protein-coupled receptor 13/GPR13G-protein coupled receptor 13/GPRV28/V28C-X3-C CKR-1
Species Reactivity	Human
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	0.156-10ng/ml
Sensitivity	0.094ng/ml
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Molecular Weight	43,969 Da
OMIM	601470
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for CX3CR1 elisa kit	Principle of the Assay||This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-Human CX3CR1antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-Human CX3CR1 antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Human CX3CR1 amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration ofHuman CX3CR1can be calculated.
Other Notes	Small volumes of CX3CR1 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 CX3CR1 purchase	MBS760835 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the CX3C chemokine receptor 1 (CX3CR1) 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 CX3CR1. The ELISA analytical biochemical technique of the MBS760835 kit is based on CX3CR1 antibody-CX3CR1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CX3CR1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CX3CR1. 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 Data & Standard Curve

Results of a typical standard run of a Human CX3CR1 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	ng/ml	0	0.156	0.313	0.625	1.25	2.5	5	10
Y	OD450	0.084	0.115	0.120	0.172	0.262	0.486	0.949	2.046

Typical Testing Data of CX3CR1 elisa kit



Typical Standard Curve of CX3CR1 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CX3CR1. It may not necessarily be applicable to this product.

NCBI GI #	283837927
NCBI GeneID	1524
NCBI Accession #	NP_001164643.1
UniProt Secondary Accession #	A0N0N6; B2R5Z4; J3KP17
UniProt Related Accession #	P49238
GenBank Nucleotide #	NM_001171172.1
NCBI Official Full Name	CX3C chemokine receptor 1 isoform b
NCBI Official Synonym Full Names	chemokine (C-X3-C motif) receptor 1
NCBI Official Symbol	CX3CR1
NCBI Official Synonym Symbols	V28; CCRL1; GPR13; CMKDR1; GPRV28; CMKBRL1
UniProt Protein Name	CX3C chemokine receptor 1
UniProt Synonym Protein Names	Beta chemokine receptor-like 1; CMK-BRL-1; CMK-BRL1; Fractalkine receptor; G-protein coupled receptor 13; V28
Protein Family	CX3C chemokine receptor
UniProt Gene Name	CX3CR1
UniProt Synonym Gene Names	CMKBRL1; GPR13; C-X3-C CKR-1; CX3CR1; CMK-BRL1
UniProt Entry Name	CX3C1_HUMAN
NCBI Protein Information	CX3C chemokine receptor 1
NCBI Summary for CX3CR1	Fractalkine is a transmembrane protein and chemokine involved in the adhesion and migration of leukocytes. The protein encoded by this gene is a receptor for fractalkine. The encoded protein also is a coreceptor for HIV-1, and some variations in this gene lead to increased susceptibility to HIV-1 infection and rapid progression to AIDS. Four transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jan 2010]

UniProt Comments for CX3CR1	CX3CR1: Receptor for the CX3C chemokine fractalkine and mediates both its adhesive and migratory functions. Acts as coreceptor with CD4 for HIV-1 virus envelope protein (in vitro). Isoform 2 and isoform 3 seem to be more potent HIV-1 coreceptors than isoform 1. Defects in CX3CR1 are a cause of susceptibility to age- related macular degeneration type 12 (ARMD12). ARMD12 is a form of age-related macular degeneration, a multifactorial eye disease and the most common cause of irreversible vision loss in the developed world. In most patients, the disease is manifest as ophthalmoscopically visible yellowish accumulations of protein and lipid that lie beneath the retinal pigment epithelium and within an elastin-containing structure known as Bruch membrane. Belongs to the G-protein coupled receptor 1 family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, multi-pass; GPCR, family 1; Cell adhesion; Motility/polarity/chemotaxis; Membrane protein, integral; Receptor, GPCR; Receptor, cytokine Chromosomal Location of Human Ortholog: 3p21.3 Cellular Component: integral to plasma membrane; neuron projection; perinuclear region of cytoplasm; plasma membrane Molecular Function: C-X3-C chemokine receptor activity; chemokine receptor activity; protein binding Biological Process: cell adhesion; cellular defense response; cerebral cortex cell migration; chemotaxis; G-protein coupled receptor protein signaling pathway; macrophage chemotaxis; memory; microglial cell activation during immune response; negative regulation of angiogenesis; negative regulation of cell migration; negative regulation of chronic inflammatory response to non-antigenic stimulus; positive regulation of angiogenesis; positive regulation of neuroblast proliferation; response to wounding; viral reproduction Disease: Coronary Heart Disease, Susceptibility To, 1; Human Immunodeficiency Virus Type 1, Susceptibility To; Macular Degeneration, Age-related, 12
Research Articles on CX3CR1	**1.** the results from the present study support the concept of the CX3CL1-mediated activation of the progression of the multiple myeloma via CX3CR1.
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