

Datasheet for ABIN7556337

CX3CR1 Protein (AA 1-354) (His tag)



Overview

Quantity:	1 mg
Target:	CX3CR1
Protein Characteristics:	AA 1-354
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CX3CR1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Cx3cr1 Protein expressed in mammalien cells.
Sequence:	MSTSFPELDL ENFEYDDSAE ACYLGDIVAF GTIFLSVFYA LVFTFGLVGN LLVVLALTNS
	RKPKSITDIY LLNLALSDLL FVATLPFWTH YLISHEGLHN AMCKLTTAFF FIGFFGGIFF ITVISIDRY
	AIVLAANSMN NRTVQHGVTI SLGVWAAAIL VASPQFMFTK RKDNECLGDY PEVLQEMWPV
	LRNSEVNILG FALPLLIMSF CYFRIIQTLF SCKNRKKARA VRLILLVVFA FFLFWTPYNI
	MIFLETLKFY NFFPSCDMKR DLRLALSVTE TVAFSHCCLN PFIYAFAGEK FRRYLGHLYR
	KCLAVLCGHP VHTGFSPESQ RSRQDSILSS FTHYTSEGDG SLLL Sequence without tag. The
	proposed Purification-Tag is based on experiences with the expression system, a different
	complexity of the protein could make another tag necessary. In case you have a special
	request, please contact us.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:	CX3CR1
Alternative Name:	Cx3cr1 (CX3CR1 Products)

Background:

CX3C chemokine receptor 1 (C-X3-C CKR-1) (CX3CR1) (mCX3CR1) (Fractalkine receptor), FUNCTION: Receptor for the C-X3-C chemokine fractalkine (CX3CL1) present on many early leukocyte cells, CX3CR1-CX3CL1 signaling exerts distinct functions in different tissue compartments, such as immune response, inflammation, cell adhesion and chemotaxis (PubMed:9918795, PubMed:10187784). CX3CR1-CX3CL1 signaling mediates cell migratory functions (PubMed:11544273, PubMed:12871640, PubMed:16675847, PubMed:18322241). Responsible for the recruitment of natural killer (NK) cells to inflamed tissues (PubMed:11544273, PubMed:16675847). Acts as a regulator of inflammation process leading to atherogenesis by mediating macrophage and monocyte recruitment to inflamed atherosclerotic plaques, promoting cell survival (PubMed:12569158, PubMed:18971423). Involved in airway inflammation by promoting interleukin 2-producing T helper (Th2) cell survival in inflamed lung (PubMed:21037587). Involved in the migration of circulating monocytes to non-inflamed tissues, where they differentiate into macrophages and dendritic cells (PubMed:12871640). Acts as a negative regulator of angiogenesis, probably by promoting

macrophage chemotaxis (PubMed:18322241). Plays a key role in brain microglia by regulating inflammatory response in the central nervous system (CNS) and regulating synapse maturation (PubMed:16732273, PubMed:21778362, PubMed:24487234). Required to restrain the microglial inflammatory response in the CNS and the resulting parenchymal damage in response to pathological stimuli (PubMed:16732273). Involved in brain development by participating in synaptic pruning, a natural process during which brain microglia eliminates extra synapses during postnatal development (PubMed:21778362). Synaptic pruning by microglia is required to promote the maturation of circuit connectivity during brain development (PubMed:24487234). Acts as an important regulator of the gut microbiota by controlling immunity to intestinal bacteria and fungi (PubMed:15653504, PubMed:29326275). Expressed in lamina propria dendritic cells in the small intestine, which form transepithelial dendrites capable of taking up bacteria in order to provide defense against pathogenic bacteria (PubMed:15653504). Required to initiate innate and adaptive immune responses against dissemination of commensal fungi (mycobiota) component of the gut: expressed in mononuclear phagocytes (MNPs) and acts by promoting induction of antifungal IgG antibodies response to confer protection against disseminated C.albicans or C.auris infection (PubMed:29326275, PubMed:33548172). Also acts as a receptor for C-C motif chemokine CCL26, inducing cell chemotaxis (By similarity). {ECO:0000250|UniProtKB:P49238, ECO:0000269|PubMed:10187784, ECO:0000269|PubMed:11544273, ECO:0000269|PubMed:12569158, ECO:0000269|PubMed:12871640, ECO:0000269|PubMed:15653504, ECO:0000269|PubMed:16675847, ECO:0000269|PubMed:16732273, ECO:0000269|PubMed:18322241, ECO:0000269|PubMed:18971423, ECO:0000269|PubMed:21037587, ECO:0000269|PubMed:21778362, ECO:0000269|PubMed:24487234, ECO:0000269|PubMed:29326275, ECO:0000269|PubMed:33548172, ECO:0000269|PubMed:9918795}.

Molecular Weight:

40.3 kDa

UniProt:

Q9Z0D9

Pathways:

Cellular Response to Molecule of Bacterial Origin

Application Details

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Application Details

Expiry Date:

12 months

Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.