

CX3CR1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17011a**Specification**

CX3CR1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P49238](#)**CX3CR1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 1524**Other Names**

CX3C chemokine receptor 1, C-X3-C CKR-1, CX3CR1, Beta chemokine receptor-like 1, CMK-BRL-1, CMK-BRL1, Fractalkine receptor, G-protein coupled receptor 13, V28, CX3CR1, CMKBRL1, GPR13

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CX3CR1 Antibody (N-term) Blocking Peptide - Protein Information**Name** CX3CR1 {ECO:0000303|PubMed:12551893, ECO:0000312|HGNC:HGNC:2558}**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:9390561, PubMed:9782118, PubMed:12055230, PubMed:23125415).

CX3CR1-CX3CL1 signaling mediates cell migratory functions (By similarity). Responsible for the recruitment of natural killer (NK) cells to inflamed tissues (By similarity). Acts as a regulator of inflammation process leading to atherogenesis by mediating macrophage and monocyte recruitment to inflamed atherosclerotic plaques, promoting cell survival (By similarity). Involved in airway inflammation by promoting interleukin 2-producing T helper (Th2) cell survival in inflamed lung (By similarity). Involved in the migration of circulating monocytes to non-inflamed tissues, where they differentiate into macrophages and dendritic cells (By similarity). Acts as a negative regulator of angiogenesis, probably by promoting macrophage chemotaxis (PubMed:14581400, PubMed:18971423). Plays a key

role in brain microglia by regulating inflammatory response in the central nervous system (CNS) and regulating synapse maturation (By similarity). Required to restrain the microglial inflammatory response in the CNS and the resulting parenchymal damage in response to pathological stimuli (By similarity). Involved in brain development by participating in synaptic pruning, a natural process during which brain microglia eliminates extra synapses during postnatal development (By similarity). Synaptic pruning by microglia is required to promote the maturation of circuit connectivity during brain development (By similarity). Acts as an important regulator of the gut microbiota by controlling immunity to intestinal bacteria and fungi (By similarity). 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 (By similarity). Required to initiate innate and adaptive immune responses against dissemination of commensal fungi (mycobiota) component of the gut: expressed in mononuclear phagocytes (MNP) and acts by promoting induction of antifungal IgG antibodies response to confer protection against disseminated *C.albicans* or *C.auris* infection (PubMed:29326275). Also acts as a receptor for C-C motif chemokine CCL26, inducing cell chemotaxis (PubMed:20974991).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed in lymphoid and neural tissues (PubMed:7590284). Expressed in lymphocyte subsets, such as natural killer (NK) cells, gamma-delta T-cells and terminally differentiated CD8(+) T-cells (PubMed:12055230). Expressed in smooth muscle cells in atherosclerotic plaques (PubMed:14581400)

CX3CR1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CX3CR1 Antibody (N-term) Blocking Peptide - Images

CX3CR1 Antibody (N-term) Blocking Peptide - Background

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].

CX3CR1 Antibody (N-term) Blocking Peptide - References

Karlmark, K.R., et al. Hepatology 52(5):1769-1782(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Yang, X., et al. Br J Ophthalmol 94(9):1211-1214(2010) Sezgin, E., et al. J. Acquir. Immune Defic. Syndr. 54(4):343-351(2010) Staniland, A.A., et al. J. Neurochem. 114(4):1143-1157(2010)