

**CX3CR1 Antibody (Extracellular Domain)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10028****Specification**

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**CX3CR1 Antibody (Extracellular Domain) - Product Information**

Application	IHC
Primary Accession	<a href="#">P49238</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40kDa KDa

**CX3CR1 Antibody (Extracellular Domain) - 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

**Target/Specificity**

Human CX3CR1. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

CX3CR1 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

**CX3CR1 Antibody (Extracellular Domain) - 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:<a href="http://www.uniprot.org/citations/9390561" target="\_blank">9390561</a>, PubMed:<a href="http://www.uniprot.org/citations/9782118" target="\_blank">9782118</a>, PubMed:<a href="http://www.uniprot.org/citations/12055230" target="\_blank">12055230</a>, PubMed:<a href="http://www.uniprot.org/citations/23125415" target="\_blank">23125415</a>). 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:<a href="http://www.uniprot.org/citations/14581400" target="\_blank">14581400</a>, PubMed:<a href="http://www.uniprot.org/citations/18971423" target="\_blank">18971423</a>). 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 (MNPs) and acts by promoting induction of antifungal IgG antibodies response to confer protection against disseminated C.albicans or C.auris infection (PubMed:<a href="http://www.uniprot.org/citations/29326275" target="\_blank">29326275</a>). Also acts as a receptor for C-C motif chemokine CCL26, inducing cell chemotaxis (PubMed:<a href="http://www.uniprot.org/citations/20974991" target="\_blank">20974991</a>).

#### **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)

#### **Volume**

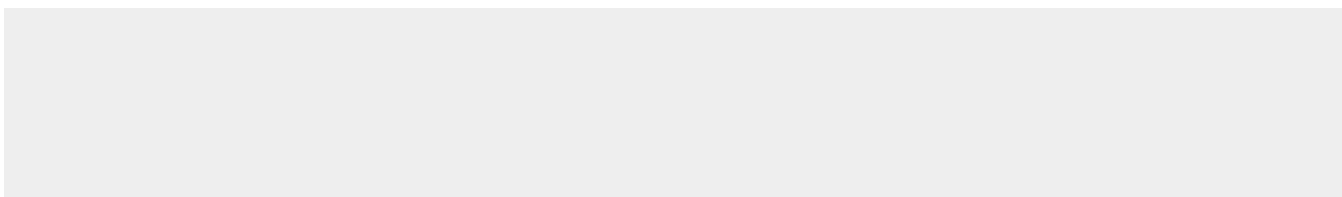
50 µl

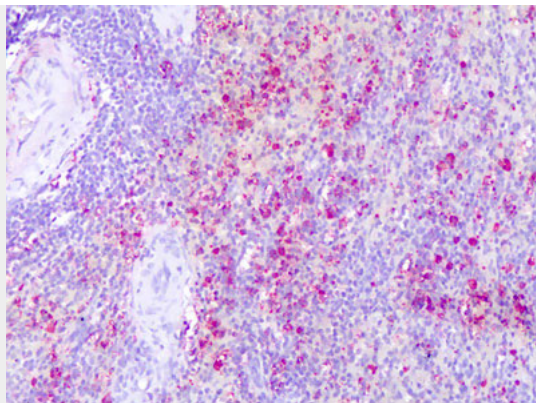
#### **CX3CR1 Antibody (Extracellular Domain) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **CX3CR1 Antibody (Extracellular Domain) - Images**





Anti-CX3CR1 antibody ALS10028 IHC of human spleen.

#### **CX3CR1 Antibody (Extracellular Domain) - Background**

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.

#### **CX3CR1 Antibody (Extracellular Domain) - References**

Raport C.J.,et al.Gene 163:295-299(1995).  
Combadiere C.,et al.DNA Cell Biol. 14:673-680(1995).  
DeVries M.E.,et al.J. Biol. Chem. 278:11985-11994(2003).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Livingston R.J.,et al.Submitted (OCT-2006) to the EMBL/GenBank/DDBJ databases.