

**CX3CL1 Antibody**  
**Catalog # ASC10057****Specification**

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**CX3CL1 Antibody - Product Information**

Application	WB, E, IP
Primary Accession	<a href="#">P78423</a>
Other Accession	<a href="#">AAB50014</a> , <a href="#">1899259</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	CX3CL1 antibody can be used for detection of CX3CL1 by Western blot at 0.5 - 2 µg/mL dilution. CX3CL1 is often observed migrating at 80 - 100 kDa in SDS-PAGE, presumably due to post-translational modification.

**CX3CL1 Antibody - Additional Information**Gene ID **6376****Other Names**

CX3CL1 Antibody: NTN, NTT, CXC3, CXC3C, SCYD1, ABCD-3, C3Xkine, fractalkine, neurotactin, FKN, A-152E5.2, Fractalkine, C-X3-C motif chemokine 1, chemokine (C-X3-C motif) ligand 1

**Target/Specificity**

CX3CL1;

**Reconstitution & Storage**

CX3CL1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

CX3CL1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CX3CL1 Antibody - Protein Information****Name** CX3CL1 {ECO:0000303|PubMed:9024663}**Function**

Chemokine that acts as a ligand for both CX3CR1 and integrins ITGAV:ITGB3 and ITGA4:ITGB1 (PubMed:<a href="http://www.uniprot.org/citations/12055230" target="\_blank">12055230</a>, PubMed:<a href="http://www.uniprot.org/citations/21829356" target="\_blank">21829356</a>, PubMed:<a href="http://www.uniprot.org/citations/23125415" target="\_blank">23125415</a>, PubMed:<a href="http://www.uniprot.org/citations/9782118" target="\_blank">9782118</a>, PubMed:<a href="http://www.uniprot.org/citations/9931005" target="\_blank">9931005</a>). The

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/12055230" target="\_blank">12055230</a>, PubMed:<a href="http://www.uniprot.org/citations/9024663" target="\_blank">9024663</a>, PubMed:<a href="http://www.uniprot.org/citations/9177350" target="\_blank">9177350</a>, PubMed:<a href="http://www.uniprot.org/citations/9782118" target="\_blank">9782118</a>). Regulates leukocyte adhesion and migration processes at the endothelium (PubMed:<a href="http://www.uniprot.org/citations/9024663" target="\_blank">9024663</a>, PubMed:<a href="http://www.uniprot.org/citations/9177350" target="\_blank">9177350</a>). Can activate integrins in both a CX3CR1-dependent and CX3CR1-independent manner (PubMed:<a href="http://www.uniprot.org/citations/23125415" target="\_blank">23125415</a>, PubMed:<a href="http://www.uniprot.org/citations/24789099" target="\_blank">24789099</a>). In the presence of CX3CR1, activates integrins by binding to the classical ligand-binding site (site 1) in integrins (PubMed:<a href="http://www.uniprot.org/citations/23125415" target="\_blank">23125415</a>, PubMed:<a href="http://www.uniprot.org/citations/24789099" target="\_blank">24789099</a>). In the absence of CX3CR1, binds to a second site (site 2) in integrins which is distinct from site 1 and enhances the binding of other integrin ligands to site 1 (PubMed:<a href="http://www.uniprot.org/citations/23125415" target="\_blank">23125415</a>, PubMed:<a href="http://www.uniprot.org/citations/24789099" target="\_blank">24789099</a>).

### Cellular Location

Cell membrane; Single-pass type I membrane protein

### Tissue Location

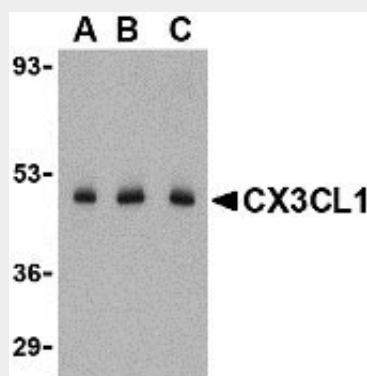
Expressed in the seminal plasma, endometrial fluid and follicular fluid (at protein level). Small intestine, colon, testis, prostate, heart, brain, lung, skeletal muscle, kidney and pancreas. Most abundant in the brain and heart

### CX3CL1 Antibody - 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](#)

### CX3CL1 Antibody - Images



Western blot analysis of CX3CL1 in C2C12 cell lysate with CX3CL1 antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.

### **CX3CL1 Antibody - Background**

CX3CL1 Antibody: Chemokines are a family of proteins associated with the trafficking of leukocytes in immune surveillance and inflammatory cell recruitment. They are classified based on the positions of key cysteine residues. CX3CL1 is a CX3C chemokine known to induce adhesion and migration of leukocytes mediated by a membrane-bound and soluble form respectively. Recent experiments have shown that CX3CL1 can suppress the production of nitrous oxide, interleukin-6, and TNF- $\alpha$  in activated microglia and neuronal cells, suggesting that it may act as an intrinsic inhibitor against neurotoxicity by activated microglia. Its receptor, CX3CR1, also functions as a co-receptor for HIV-1 and HIV-2 envelope fusion and virus infection, which can be inhibited by CX3CL1.

### **CX3CL1 Antibody - References**

Bajetto A, Bonavia R, Barbero S, et al. Chemokines and their receptors in the central nervous system. *Front. Neuroendocrinol.* 2001; 22:147-84.  
Umehara H, Goda S, Imai T, et al. Fractalkine, a CX3C-chemokine, functions predominantly as an adhesion molecule in monocytic cell line THP-1. *Immunol. Cell. Biol.* 2001; 79:298-302.  
Mizuno T, Kawanokuchi J, Numata K, et al. Production and neuroprotective functions of fractalkine in the central nervous system. *Brain Res.* 2003; 979:65-70.  
Combadiere C, Salzwedel K, Smith ED, et al. Identification of CX3CR1. A chemotactic receptor for the human CX3C chemokine fractalkine and a fusion coreceptor for HIV-1. *J. Biol. Chem.* 1998; 273:23799-804.