

## Polyclonal Antibody to CX3CR1 / GPR13 - Purified

<b>Alternate names:</b>	Beta chemokine receptor-like 1, C-X3-C CKR-1, CMK-BRL-1, CMKBRL1, CX3C chemokine receptor 1, Fractalkine receptor, G-protein coupled receptor 13, V28
<b>Catalog No.:</b>	SP7048P
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	CX3CR1 is one of the chemokine receptors that are required as coreceptors for HIV infection. The genes encoding human, murine, and rat CX3CR1 were cloned and designated V28 and CMKBRL1, CX3CR1, and RBS11, respectively (2-5). The encoded seven transmembrane protein was recently identified as the receptor for a novel transmembrane molecule, fractalkine, and renamed CX3CR1 (1). Recently, CX3CR1 was found to serve as a coreceptor for HIV-1 and HIV-2 envelope fusion and virus infection, which can be inhibited by fractokine (product citation 1). CX3CR1 mediates leukocyte migration and adhesion (1). CX3CR1 is expressed in a variety of human tissues and cell lines (4).
<b>Uniprot ID:</b>	<a href="#">P49238</a>
<b>NCBI:</b>	<a href="#">NP_001164642.1</a>
<b>GeneID:</b>	<a href="#">1524</a>
<b>Host:</b>	Rabbit
<b>Immunogen:</b>	Peptide corresponding to amino acids 2 to 21 of Human CX3CR1.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Protein G Chromatography <b>Buffer System:</b> PBS <b>Preservatives:</b> 0.02% Sodium Azide
<b>Applications:</b>	<b>Western blot:</b> 1/500-1/2000, a 50 kDa band is observed. <i>Recommended Positive Control:</i> Human spleen. <b>Immunohistochemistry on Paraffin Sections:</b> 2 µg/ml. <b>ELISA:</b> 1/100-1/2,000. <b>Flow cytometry:</b> 1/10-1/1,000. <b>Immunocytochemistry/Immunofluorescence:</b> 10 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody is specific for CX3CR1. <b>Species:</b> Human, Mouse and Rat. Other species not tested.
<b>Storage:</b>	Store undiluted at 2-8°C for one month or (in small aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**Product Citations:**

**Originator or purchased from resellers:**

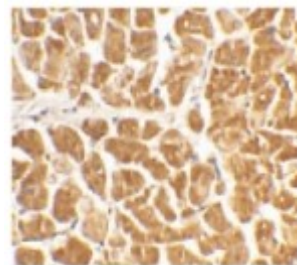
1. Aoyama T, Inokuchi S, Brenner DA, Seki E. CX3CL1-CX3CR1 interaction prevents carbon tetrachloride-induced liver inflammation and fibrosis in mice. *Hepatology*. 2010 Oct;52(4):1390-400. doi: 10.1002/hep.23795. PubMed PMID: 20683935.
2. Oh IS, Suh DW, Ha KY. Hypertrophy of the ligament flavum in degenerative lumbar stenosis associated with the increased expression of fractalkine (CX3CL1)/CX3CR1 chemokine. *Connect Tissue Res*. 2013;54(6):380-5. doi: 10.3109/03008207.2013.848199. PubMed PMID: 24060055.

**General Readings:**

1. Raport CJ, Schweickart VL, Eddy RL, Shows TB, Gray PW. The orphan G-protein-coupled receptor-encoding gene V28 is closely related to genes for chemokine receptors and is expressed in lymphoid and neural tissues. *Gene*. 1995 Oct 3;163(2):295-9. PubMed PMID: 7590284.
2. Combadiere C, Ahuja SK, Murphy PM. Cloning, chromosomal localization, and RNA expression of a human beta chemokine receptor-like gene. *DNA Cell Biol*. 1995 Aug;14(8):673-80. PubMed PMID: 7646814.
3. Combadiere C, Gao J, Tiffany HL, Murphy PM. Gene cloning, RNA distribution, and functional expression of mCX3CR1, a mouse chemotactic receptor for the CX3C chemokine fractalkine. *Biochem Biophys Res Commun*. 1998 Dec 30;253(3):728-32. PubMed PMID: 9918795.
4. Harrison JK, Barber CM, Lynch KR. cDNA cloning of a G-protein-coupled receptor expressed in rat spinal cord and brain related to chemokine receptors. *Neurosci Lett*. 1994 Mar 14;169(1-2):85-9. PubMed PMID: 8047298.
5. Combadiere C, Salzwedel K, Smith ED, Tiffany HL, Berger EA, Murphy PM. Identification of CX3CR1. A chemotactic receptor for the human CX3C chemokine fractalkine and a fusion coreceptor for HIV-1. *J Biol Chem*. 1998 Sep 11;273(37):23799-804. PubMed PMID: 9726990.
6. Volin MV, Woods JM, Amin MA, Connors MA, Harlow LA, Koch AE. Fractalkine: a novel angiogenic chemokine in rheumatoid arthritis. *Am J Pathol*. 2001 Oct;159(4):1521-30. PubMed PMID: 11583978.

**Pictures:**

**Figure 1.** Immunohistochemical staining of human heart tissue using anti-CX3CR1 (NT) at 2 µg/ml.



**Figure 2.** Western blot analysis for CX3CR1 using SP7048P at 2 µg/ml dilution against 20 µg/lane of human spleen lysate in the absence (lane 1) and presence of blocking peptide (lane 2).

