

## Product Datasheet

### Recombinant Fractalkine/CX3CL1, Rat (orb1494649)

#### Description

Chemokine (C-X3-C motif) ligand 1 (CX3CL1) is a large cytokine protein of 373 amino acids. It contains multiple domains and is the only known member of the CX3C chemokine family. It is also commonly known under the names fractalkine (in humans) and neurotactin (in mice). The polypeptide structure of CX3CL1 differs from the typical structure of other chemokines. For example, the spacing of the characteristic N-terminal cysteines is different; there are three amino acids separating the initial pair of cysteines in CX3CL1, while there are none in CC chemokines and only one in CXC chemokines. CX3CL1 is produced as a long protein (with 373-amino acid in humans) with an extended mucin-like stalk and a chemokine domain on top. The mucin-like stalk allows it to bind to the surface of certain cells. Soluble CX3CL1 potently chemoattracts T cells and monocytes, while the cell-bound chemokine promotes strong adhesion of leukocytes to activated endothelial cells, where it is primarily expressed. CX3CL1 can signal through the chemokine receptor CX3CR1. Recombinant rat Fractalkine/CX3CL1 produced in HEK293 cells is a polypeptide chain containing 310 amino acids. A fully biologically active molecule, rrFractalkine/CX3CL1 has a molecular mass of 70-90 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

#### Endotoxins

< 0.2 EU/μg, determined by LAL method.

#### Preservatives

Lyophilized after extensive dialysis against PBS.

#### Form/Appearance

Lyophilized after extensive dialysis against PBS.

#### Storage

Lyophilized recombinant Rat Fractalkine/CX3CL1 remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, recombinant Rat Fractalkine/CX3CL1 should be stable up to 1 week at 4°C or up to 2 months at -20°C.

#### Note

For research use only

#### Application notes

Reconstituted in ddH2O or PBS at 100μg/ml.

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**Protein Sequence**

QHLGMTKCNITCHKMTSPIPVTLIIHYQLNQESCGKRAIILETRQHRHFCADPKEKWVQDA  
MKHLDHQTAALTRNGGKFE  
KRVDNVTPRITSATRGLSPTALAKPESATVEDLTLEPTAISQEARRPMGTSQEPPAAVTGSSP  
STSKAQDAGLAAKPQST  
GISEVAAVSTTIWPSSAVYQSGSSLWAEKATESPPTIALSTQASTTSSPKQNVGSEGQPPW  
VQEQDSTPEKSPGPEETN  
PVHTDIFQDRGPGSTVHPSVAPTSSEKTPSPELVASGSQAPKVEEPIHATADPQKLSVFITPV  
PDSQAAT

**Purity**

> 98% as analyzed by SDS-PAGE.

**Source**

HEK 293

**MW**

70-90 kDa, observed by reducing SDS-PAGE.

**Expiration Date**

6 months from date of receipt.

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