

### Synonym

CX3CL1, Fractalkine

### Source

Biotinylated Human CX3CL1, His Tag, primary amine labeling (CX1-H8221) is expressed from human 293 cells (HEK293). It contains AA Gln 25 - Gln 341 (Accession # [AAH01163](#)).

Predicted N-terminus: Gln 25

### Molecular Characterization

CX3CL1(Gln 25 - Gln 341)  
AAH01163 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 35.5 kDa. The protein migrates as 50-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Labeling

*The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.*

### Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>95% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

### Storage

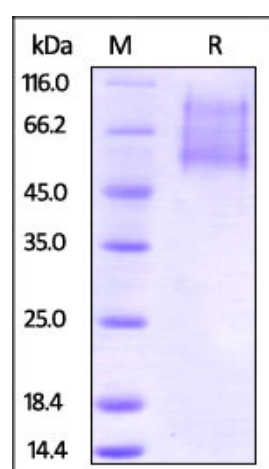
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### SDS-PAGE



Biotinylated Human CX3CL1, His Tag, primary amine labeling on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### Background

Fractalkine is also known as C-X3-C motif chemokine 1 (CX3CL1) and neurotactin. Fractalkine is a large cytokine protein of 373 amino acids, it contains multiple domains and is the only known member of the CX3C chemokine family. Fractalkine is found commonly throughout the brain, particularly in neural cells, and its receptor is known to be present on microglial cells. It has also been found to be essential for microglial cell migration. CX3CL1 is also up-regulated in the hippocampus during a brief temporal window following spatial learning, the purpose of which may be to regulate glutamate-mediated neurotransmission tone. This indicates a possible role for the chemokine in the protective plasticity process of synaptic scaling.

### **Clinical and Translational Updates**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.