

**PrimeGene Technical Data Sheet**

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| <b>Catalog Number:</b>          | 223-01   |
| <b>Source:</b>                  | <i>Escherichia coli</i> .  |
| <b>Molecular Weight:</b>        | Approximately 8.7 kDa, a single non-glycosylated polypeptide chain containing 76 amino acids and comprises only the chemokine domain of Murine Fractalkine.  |
| <b>Quantity:</b>                | 5µg/20µg/1000µg  |
| <b>AA Sequence:</b>             | QHLGMTKCEI MCGKMTSRIP VALLIRYQLN QESCGKRAIV LETTQHRRFC<br>ADPKEKVVQD AMKHLDHQAA ALTKNG   |
| <b>Purity:</b>                  | > 97 % by SDS-PAGE and HPLC analyses.  |
| <b>Biological Activity:</b>     | Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using human peripheral blood lymphocytes (PBL) is less than 0.5 µg/ml, corresponding to a specific activity of > 2000 IU/mg.   |
| <b>Physical Appearance:</b>     | Sterile Filtered White lyophilized (freeze-dried) powder.  |
| <b>Formulation:</b>             | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.   |
| <b>Endotoxin:</b>               | Less than 0.1 EU/µg of rMuFractalkine/CX3CL1 as determined by LAL method.  |
| <b>Reconstitution:</b>          | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| <b>Shipping:</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  |
| <b>Stability &amp; Storage:</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>                                 |
| <b>Usage:</b>                   | This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>   |

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***Murine Fractalkine/CX3CL1***

CX3CL1 recently identified through bioinformatics is the only known member of the CX3C chemokine family and it is also commonly known under the names fractalkine (in humans) and neurotactin (in mice). Unlike other known chemokines, CX3CL1 is a type 1 membrane protein containing a chemokine domain tethered on a long mucinlike stalk. The soluble form of CX3CL1 is chemotactic for T-cells and monocytes, but not for neutrophils. CX3CL1 may play a role in regulating leukocyte adhesion and migration processes at the endothelium. Mouse CX3CL1 shares 85 % and 78 % a.a. sequence identity with rat and human CX3CL1, respectively, within the chemokine domain, but lower sequence identity within other domains.