

## Recombinant Rat Fractalkine/CX3CL1 (rRtFractalkine/CX3CL1)

## **ChemWhat Technical Data Sheet (TDS)**

Catalog Number:

243-01

Source:

Escherichia coli.

Molecular Weight:

Approximately 8.8 kDa, a single non-glycosylated polypeptide chain containing 76 amino acids and

comprises only the chemokine domain of Rat Fractalkine.

Quantity:

 $5 \mu g / 20 \mu g / 1000 \mu g$ 

AA Sequence:

QHLGMTKCNI TCHKMTSPIP VTLLIHYQLN QESCGKRAII LETRQHRHFC ADPKEKWVQD

AMKHLDHQTA ALTRNG

Purity:

> 95 % by SDS-PAGE and HPLC analyses.

**Biological Activity:** 

Fully biologically active when compared to standard. The biological activity determined by a

chemotaxis bioassay using human monocytes is in a concentration of 5.0-10 ng/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Endotoxin: Lyophilized from a 0.2 μm filtered concentrated solution in 2× PBS, pH 7.4. Less than 1 EU/μg of rRtFractalkine/CX3CL1 as determined by LAL method.

Reconstitution:

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  $\leq$  -20  $\mathbb C$ . Further dilutions should be made in appropriate buffered solutions.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature

recommended below.

Stability & Storage:

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

12 months from date of receipt, -20 to -70 °C as supplied.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 to -70 °C under sterile conditions after reconstitution.

Usage:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

## Rat 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 talk. The soluble form of CX3CL1 is chemotactic for T-cells and monocytes, but not for neutrophils. In addition, it may play a role in regulating leukocyte adhesion and migration processes at the endothelium. Recombinant Rat CX3CL1 contains 76 amino acids and it shares approximately 86 % and 83 % amino acid sequence homology with the murine and human protein.

Rev. 08/20/2018 V.3