

## ChemUhot Recombinant Murine Platelet Factor-4/CXCL4 (rMuPF-4/CXCL4)

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

Catalog Number:

221-04

Source:

Escherichia coli.

Molecular Weight:

Approximately 8.2 kDa, a single non-glycosylated polypeptide chain containing 76 amino acids.

Quantity:

5μg/20μg/1000μg

AA Sequence:

VTSAGPEESD GDLSCVCVKT ISSGIHLKHI TSLEVIKAGR HCAVPQLIAT LKNGRKICLD

RQAPLYKKVI KKILES

**Purity:** 

> 97 % 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 neutrophils is in a concentration of 10-100ng/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, 1.5 M NaCl, pH 7.4.

Endotoxin:

Less than 1 EU/µg of rMuPF-4/CXCL4 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 mg/mL. Stock solutions should be apportioned into working aliquots and stored

at  $\leq$  -20 °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.

## Murine Platelet Factor-4/CXCL4

CXCL4 (PF4) is a small cytokine belonging to the CXC chemokine family and it is also known as chemokine (C-X-C motif) ligand 4 (CXCL4). This chemokine is released from alpha-granules of activated platelets during platelet aggregation and neutralizes the anticoagulant effect of heparin because it binds more strongly to heparin than to the chondroitin-4-sulfate chains of the carrier molecule. CXCL4 interacts with a splice variant of the chemokine receptor CXCR3. Recombinant mouse CXCL4 contains 76 amino acids which is a single non-glycosylated polypeptide chain. Specifically, Human and mouse CXCL4 share about a 60 % identity.

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