

## PRODUCT DATA SHEET



Bioworld Technology, Inc.

### Recombinant Human Platelet Factor-4/CXCL4 (rHuPF-4/CXCL4)

Catalog Number: PR1109

Source: Escherichia coli.

Quantity: 5µg/20µg/1.0mg

#### Description

Platelet Factor 4, is a member of the CXC chemokine family, CXCL4. CXCL4 has homology with IL8 and  $\beta$ thromboglobulin.

The active protein consists of a tetramer composed of individual CXCL4 subunits. Megakaryocytes synthesize CXCL4 and store it as tetramers in  $\alpha$ -granules. The CXCL4 tetramers are secreted by activated platelets and can be measured at micromolar levels in serum. In contrast to other CXC chemokines, CXCL4 lacks chemotactic activity for polymorphonuclear granulocytes. CXCL4 does not contain an ELR motif. However, many other functions have been observed for CXCL4. CXCL4 is involved in monocyte survival and differentiation into macrophages, and it has antiangiogenic activity. CXCL4 has been demonstrated to inhibit the binding of FGF2 to high affinity receptors and its subsequent internalization. Cell surface neutrophil chondroitin sulfate chains serve as CXCL4 binding sites; affinity is controlled by the degree of sulfation of these chains.

#### Molecular Weight:

Approximately 7.77 kDa, a single non-glycosylated polypeptide chain containing 70 amino acids.

#### Purity:

>97% by SDS-PAGE and HPLC analyses.

#### Biological Activity:

Measured by its ability to inhibit human FGF-basic-dependent proliferation of NR6R-3T3 mouse fibroblasts. The ED50 for this effect is typically 5-15 µg/mL.

#### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

#### Formulation:

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

#### AA Sequence:

E A E E D G D L Q C L C V K T T S Q V R P R H I T S L  
E V I K A G P H C P T A Q L I A T L K N G R K I C L D L  
Q A P L Y K K I I K K L L E S

#### Endotoxin:

Less than 1EU/µg of rHuPF-4 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 <-20°C. Further dilutions should be made in appropriate buffered solutions.

#### Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

#### Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

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