

Recombinant Human Platelet Factor-4 (rh PF-4 / CXCL4)

Synonyms: Iroplact, Oncostatin-A, SCYB4,

Introduction: Platelet factor-4 is released from the alpha-granules of activated platelets and binds with high affinity to heparin. Its major physiologic role appears to be neutralization of heparin-like molecules on the endothelial surface of blood vessels, thereby inhibiting local antithrombin III activity and promoting coagulation. As a strong chemoattractant for neutrophils and fibroblasts, PF-4 probably has a role in inflammation and wound repair. Oncostatin-A is a member of the CXC chemokine family. Human PF-4 is used for the proof of heparin-induced thrombocytopenia. Furthermore it is used as an inhibitor in the angiogenesis during tumor therapy.

Description: Human recombinant PF-4 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 70 amino acids and having a molecular mass of 7.8 kDa.

Source: *Escherichia coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized after extensive dialysis against 50mM Tris-HCl pH 8.0 and 150mM NaCl buffer. The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized PF-4 in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized PF-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PF-4 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by RP-HPLC and by SDS-PAGE.

Amino Acid Sequence: The sequence of the first four N-terminal amino acids was determined and was found to be Glu-Ala-Glu-Glu-Asp.

Biological Activity: Determined by its ability to inhibit human FGF basic dependent proliferation of NR6R3T3 mouse fibroblasts the ED50 was found to be 5 - 15 µg/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11344810
<i>medium</i>	20 µg	Cat.N°	11344814

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