

Recombinant Human Platelet Factor-4 Variant 1 (rh PF-4 Variant 1 / CXCL4)

Synonyms: Iroplact, Oncostatin-A, SCYB4,

Introduction: Platelet factor-4 is 70-amino acid protein that 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-4Variant1 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 from a 0.22 µm filtered solution in 25 mM sodium phosphate, 500 mM NaCl, pH 7.0, The sample size of 1µg contains Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized PF-4Variant1 in sterile H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized PF-4V1 although stable at room temperature for 1 week, should be stored desiccated below -18°C. Upon reconstitution PF-4 V1 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 SDS-PAGE.

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

Amino Acid Sequence:

EAEEDGDLQC LCVKTTTSQVR PRHITSLEVI KAGPHCPTAQ LIATLKNGRK ICLDLQALLY KKIIKEHLES.

Biological Activity: The rh PF-4V1 is fully biologically active determined by its activity to inhibit migration of human umbilical vein endothelial cells in a concentration range of 10-100 ng/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°	11344990
<i>medium</i>	20 µg	Cat.N°	11344994
<i>large</i>	100 µg	Cat.N°	11344996
<i>x-large</i>	500 µg	Cat.N°	11344997

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