

Recombinant Human Platelet Factor-4/CXCL4

#R00357

Size: 5 µg/100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Platelet Factor-4 (PF-4) is a small cytokine belonging to the CXC chemokine family that is also known as chemokine (C-X-C motif) ligand 4 (CXCL4). The gene for human CXCL4 is located on human chromosome 4. This chemokine is released from alpha-granules of activated platelets during platelet aggregation and neutralizes the anticoagulant effect of heparin. It interacts with a splice variant of the chemokine receptor CXCR3 besides be chemotactic for neutrophils, fibroblasts and monocytes. Recombinant human CXCL4 contains 70 amino acids binds with high affinity to heparin. Specifically, Human and mouse CXCL4 share about a 60 % identity.

AA Sequence

EAEEDGDLQCLCVKTTTSQVRPRHITSLEVIKAGPHCP
TAQLIATLKNRKRKICLDLQAPLYKKIIKLLES

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.

Product Specification

Synonyms	Iroplact, Oncostatin-A
Accession	P02776
GeneID	5196
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 7.8 kDa, a single non-glycosylated polypeptide chain containing 70 amino acids.
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 fibroblasts is in a concentration of 1.0-10 ng/ml.
Physical Appearance	Sterile Filtered White Lyophilized (freeze-dried) powder.

Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in Acetonitrile and TFA.
Endotoxin	Less than 1 EU/µg of rHuPF-4/CXCL4 as determined by LAL method.
