Platelet Factor-4 (CXCL4), mouse recombinant (rmPF4)

Catalog No: 97334
Lot No: XXXXX
Source: *E. coli*
Synonyms: CXCL4, PF-4, PF4, Iroplact, Oncostatin-A, SCYB4, MGC138298

Background

Platelet factor-4 is a 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, PF4 probably has a role in inflammation and wound repair. Oncostatin-A is a member of the CXC chemocinfamily. Human PF4 is used for the proof of heparin-induced thrombocytopenia. Furthermore it is used as an inhibitor in the angiogenesis during tumor therapy.

Description

CXCL4 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 76 amino acids and having a molecular mass of 8.2 kDa.

Physical Appearance

Sterile filtered white lyophilized powder.

Formulation

The mouse CXCL4 protein was lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4 and 1.0 M NaCl.

Solubility

It is recommended to reconstitute the lyophilized CXCL4 in sterile 18 MΩ-cm H_2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized CXCL4, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Mouse CXCL4 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 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

VTSAGPEESD GDLSCVCVKT ISSGIHLKHI TSLEVIKAGR HCAVPQLIAT LKNGRKICLD RQAPLYKKVI KKILES

Activity

Determined by its ability to chemoattract human neutrophils using a concentration range of 10-100 ng/ml.

Usage

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