

Platelet factor 4 Protein, Mouse

Cat. No.:	HY-P71885
Synonyms:	Pf4; Cxcl4; Scyb4; Platelet factor 4; PF-4; C-X-C motif chemokine 4
Species:	Mouse
Source:	E. coli
Accession:	Q9Z126 (V30-S105)
Gene ID:	56744
Molecular Weight:	Approximately 8.2-12 kDa

PROPERTIES

AA Sequence	V T S A G P E E S D G D L S C V C V K T I S S G I H L K H I T S L E V I K A G R H C A V P Q L I A T L K N G R K I C L D R Q A P L Y K K V I K K I L E S
Biological Activity	1. Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human neutrophils is in a concentration of 10-100 ng/mL. 2. Measured by its ability to inhibit the FGF basic-dependent proliferation of HUVEC human umbilical vein endothelial cells. The ED ₅₀ for this effect is ≤0.2517 µg/mL, corresponding to a specific activity is ≥3.97×10 ³ U/mg.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 µm solution of PBS, pH 7.4 or 50 mM Tris-HCL, 300 mM NaCl, pH 8.0.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in sterile distilled water. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Platelet factor 4 (PF4) is a protein released during platelet aggregation, exerting its influence on various physiological processes. It plays a crucial role in neutralizing the anticoagulant effect of heparin by exhibiting a higher binding affinity to heparin compared to the chondroitin-4-sulfate chains of the carrier molecule. Beyond its anticoagulant properties, PF4 demonstrates chemotactic effects on neutrophils and monocytes, contributing to immune responses. Additionally, PF4 acts to inhibit endothelial cell proliferation, suggesting a role in the regulation of vascular processes. Structurally, PF4 forms a
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homotetramer, and it interacts with TNFAIP6, specifically engaging with its Link domain. This intricate interplay highlights the multifaceted functions of PF4 in hemostasis, immune response, and vascular regulation.

Caution: Product has not been fully validated for medical applications. For research use only.

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