

Platelet Factor 4 (PF4) – human, recombinant

[PF4-hr]

Properties*

Product #	[PF4-hr]
Species	human
Source	<i>Escherichia coli</i>
Mol wt	7.8 kDa
UniProt #	P02776
Purity	> 95% as determined by SDS-PAGE (silver staining)
AA sequence	MEAEEDGDLQCLCVKTTTSQVRPRHITSLEVIKAGPHCPTA QLIATLKNRGRKICLDLQAPLYKKIIKKLLES
Product sizes	100 µg, 200 µg, 1 mg (different sizes are available on request)
Quality control	PF4/Heparin-ELISA (HIT-Test)** , SDS-Page, Western Blot, N-terminal sequencing and MALDI-TOF-MS
Physical form	Lyophilized in PBS (0.22 µm filtered), carrier free (different buffers are available on request)
Reconstitution	Reconstitute carefully in <i>A. dest.</i> (1µl/µg PF4). Adjust The protein concentration with PBS. Do not vortex.
Shipping	Ambient temperature
Storage	Store dark in working aliquots at -20°C to -80°C. Avoid repeated freezing and thawing.
Stability	Lyophilisate is stable for at least 12 month at -20°C.

Description

Platelet Factor 4 (PF4; also known as CXCL4) is synthesized in megakaryocytes and platelets. The monomer of the chemokine consists of 70 amino acids resulting in a molecular weight of 7.8 kDa. Depending on the protein concentration and buffer conditions, PF4 appears as a mono-, di-, tri-, or tetramer. PF4 is biologically active in the tetrameric form, promotes blood coagulation and is also important in wound healing and inflammation. PF4, together with heparin (PF4-heparin complex) is an important antigen of antibodies inducing heparin-induced thrombocytopenia (HIT). Purified PF4 is used in several laboratory tests for the detection of HIT antibodies.

* Please note that the properties of this product (structure, antigenicity, function etc.) may alter under different experimental conditions. If changes (buffers, pH etc.) are made, the responsibility is transferred from the seller to the customer. The material is neither intended nor certified for human or animal therapeutic use.

** The production of recombinant PF4 and its quality control is performed in collaboration with the Institute of Immunology and Transfusion Medicine, Department of Transfusion Medicine of the University Medicine Greifswald.

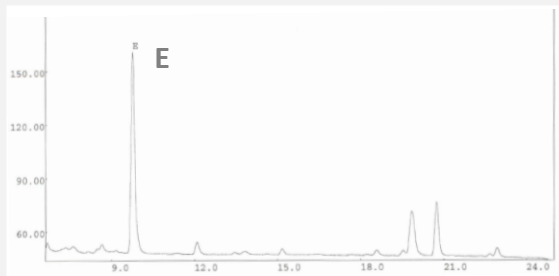
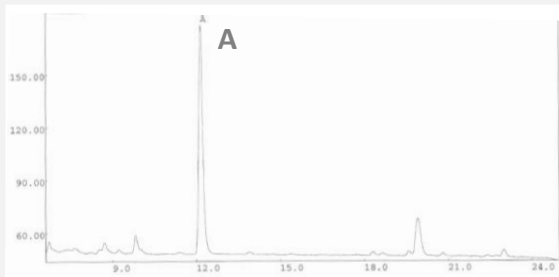
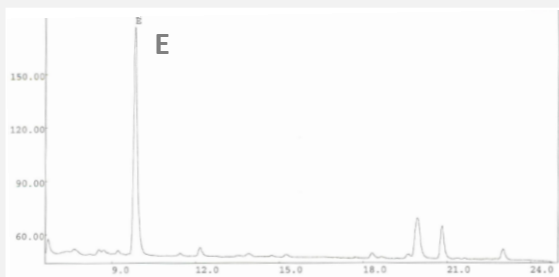
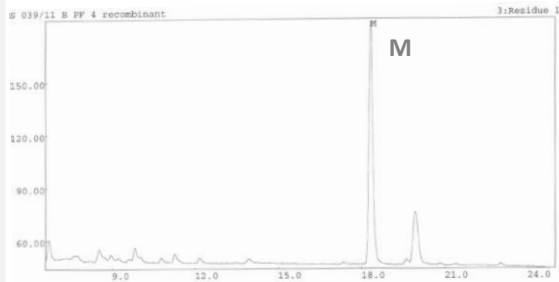


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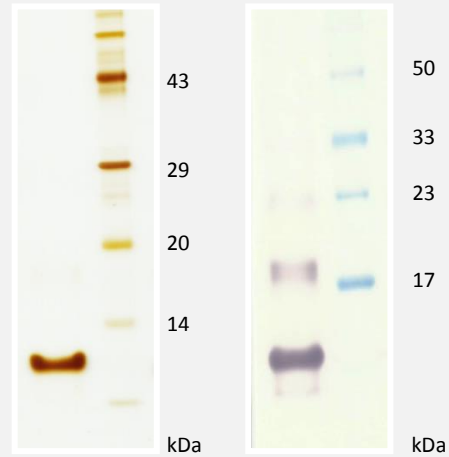
[PF4-hr]

N-terminal sequencing: PF4-hr

MEAEEDGDLQCLCVKTTSQVRPRHITSLEVIKAGH
CPTAQLIATLKNRGRKICLDLQAPLYKKIIKKLLES



SDS-Page & Western Blot: PF4-hr



A) SDS-Page (15% PAA, silver staining) and B) Western Blot of 1 µg PF4-hr: A) Recombinant human PF4 (PF4-hr) appears as a monomer and a slight dimer band under denaturing conditions. B) Monomeric PF4-hr and its multimers were detected using PF4 antibodies (G7, Santa Cruz, #sc374195) and alkaline phosphatase conjugated secondary antibodies.

Recent publications referencing this product:

Blanchet X, Cesarek K, Brandt J, et al. Inflammatory role and prognostic value of platelet chemokines in acute coronary syndrome. *Thromb Haemost.* 2014; 112(6):1277–87. – Supplementary Material

