

Platelet Factor 4 (PF4) – human, Biotin-labeled

[PF4-h-B]

Properties*

Product #	[PF4-h-B]
Species	human
Source	platelets
Mol wt	7.8 kDa (monomer)
Label	Biotin-XX, SSE
UniProt #	P02776
Purity	> 98% as determined by SDS-PAGE (silver staining)
Product sizes	100 µg, 200 µg, 1 mg (different sizes are available on request)
Quality control	PF4/Heparin-ELISA (HIT-Test)**, PF4-ELISA, Biotin-ELISA, 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. 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 immuno assays for the detection of HIT antibodies. Labeling of PF4 with Biotin-XX, SSE (14-atom spacer improves binding of antibodies, avidin and streptavidin) enables effective detection of PF4 in these assays.

*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.

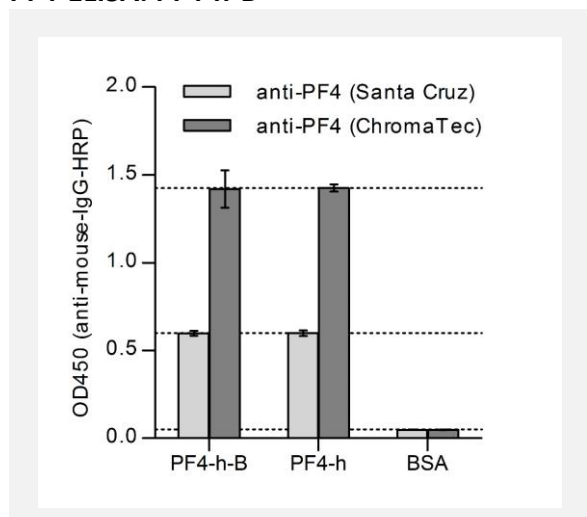
**The production of PF4 and its quality control is performed in collaboration with the Institute of Immunology and Transfusion Medicine, Department of Transfusion Medicine of the University Medicine Greifswald.



Platelet Factor 4 (PF4) – human, Biotinylated

[PF4-h-B]

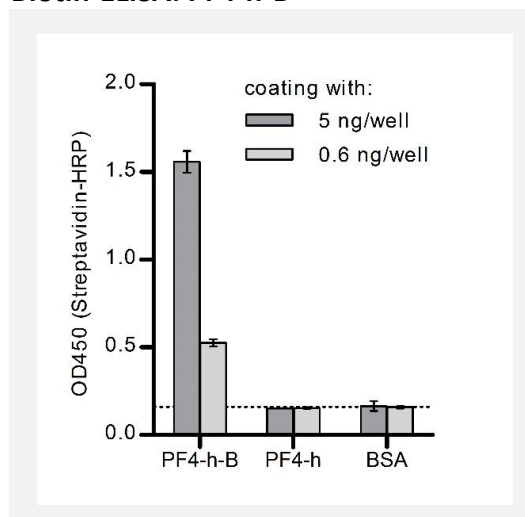
PF4-ELISA: PF4-h-B



PF4-ELISA: PF4-h-B

Biotinylated PF4 (# PF4-h-B, 1 µg/well) and unlabeled PF4 (# PF4-h, 1 µg/well) were detected similarly by two different PF4 antibodies: Santa Cruz (# sc374195, 200 ng/ml) and ChromaTec (# a-PF4-h1, 200 ng/ml). 1 µg/well BSA was used as control. PF4 antibody binding was detected using HRP-conjugated secondary antibodies.

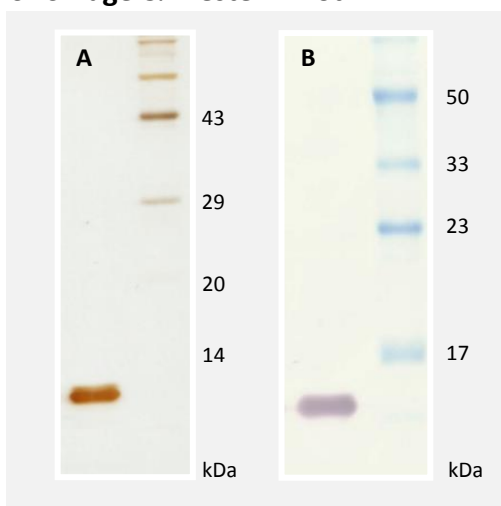
Biotin-ELISA: PF4-h-B



Biotin-ELISA: PF4-h-B

Biotinylation of PF4 (# PF4-h-B, coated with 5 or 0.6 ng/well) was confirmed by Biotin-ELISA using Streptavidin-HRP (Invitrogen, # SNN1004). Similar concentrations of unlabeled PF4 (ChomaTec GmbH, # PF4-h) and BSA were used as controls.

SDS-Page & Western Blot: PF4-h-B



SDS-Page and Western Blot: PF4-h-B:

A) SDS-Page: Biotinylated PF4 (# PF4-h-B) appears as a monomer under denaturing conditions (7.8 kDa). **B)** Western Blot: Biotinylated PF4 was detected using PF4 antibodies (G7, Santa Cruz, #sc374195) and alkaline phosphatase conjugated secondary antibodies.

