# abcam

### Product datasheet

## Human PF4 ELISA Kit (CXCL4) ab189573

重组 SimpleStep ELISA

7 References 7 图像

概述

回收率

产品名称 人PF4 ELISA试剂盒(CXCL4)

检测方法 Colorimetric

精确度

样品 SD Mean CV% 8 3.7% Overall

批次间

特定样本回收率

批次内

样品 Mean SD CV% n Overall 3 3.5%

样品类型 Cell culture supernatant, Serum, Cell culture media, EDTA Plasma, Cit plasma

检测类型 Sandwich (quantitative)

灵敏度 24.29 pg/ml

范围 78.13 pg/ml - 5000 pg/ml

样品类型	平均%	范围
Cell culture supernatant	108	100% - 115%
Serum	93	89% - 99%
Cell culture media	87	85% - 90%
EDTA Plasma	103	97% - 115%
Cit plasma	92	83% - 100%

检测时间 1h 30m

实验步骤 One step assay

#### 种属反应性

产品概述

与反应: Human

As of November 23, 2020, Human PF4 (CXCL4) ELISA kit has been re-developed. We have identified new recombinant monoclonal antibodies to provide improved performance and consistency.

Human PF4 ELISA Kit (CXCL4) (ab189573) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of PF4 (CXCL4) protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human PF4 (CXCL4) with 24.29 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

说**明** 

Platelet factor-4 (PF4/CXCL4) is a 70-amino acid protein that is released from the alpha-granules of activated platelets whose major physiologic role appears to be inhibiting local antithrombin III activity and promoting coagulation. PF4 (CXCL4) has a role in inflammation and wound repair by acting as a strong chemoattractant for neutrophils, monocytes, and fibroblasts.

平台

Microplate

#### 性能

#### 存放说明

Store at +4°C. Please refer to protocols.

组 <b>件</b>	1 x 96 tests	1 x 96 tests
10X Human PF4 Capture Antibody	1 x 600µl	1 x 600µl
10X Human PF4 Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
Antibody Diluent CPI2	1 x 6ml	1 x 6ml
Human PF4 Lyophilized Recombinant Protein (ab9562)	2 vials	2 vials
Plate Seals	1 unit	1 unit

组 <b>件</b>	1 x 96 tests	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

功能 Released during platelet aggregation. Neutralizes the anticoagulant effect of heparin because it

binds more strongly to heparin than to the chondroitin-4-sulfate chains of the carrier molecule. Chemotactic for neutrophils and monocytes. Inhibits endothelial cell proliferation, the short form is

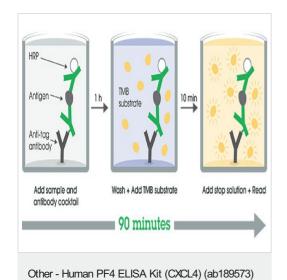
a more potent inhibitor than the longer form.

**序列相似性** Belongs to the intercrine alpha (chemokine CxC) family.

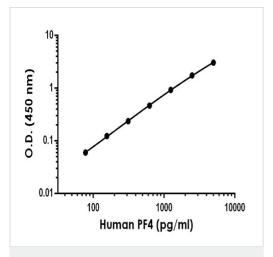
翻译后修饰 Binds non-covalently to a proteoglycan molecule.

细**胞定位** Secreted.

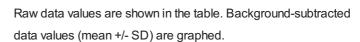
#### 图片

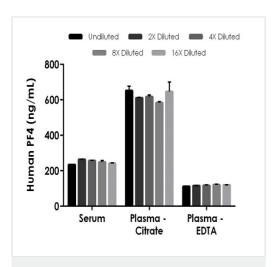


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



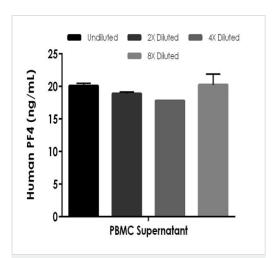
Example of human PF4 standard curve in Sample Diluent NS.





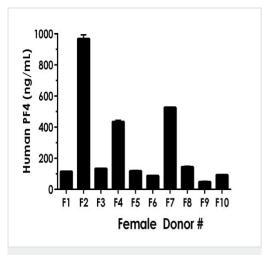
Interpolated concentrations of native PF4 in human serum, plasma and cell culture supernatant samples.

The concentrations of PF4 were measured in duplicates, interpolated from the PF4 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 2%, plasma (citrate) 0.5%, and plasma (EDTA) 4%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PF4 concentration was determined to be 249.53 ng/mL in serum, 622.09 ng/mL in plasma (citrate), and 117.28 ng/mL in plasma (EDTA).

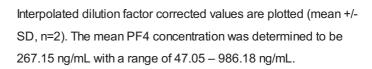


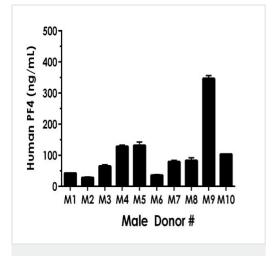
Interpolated concentrations of native PF4 in human cell culture supernatant samples.

The concentrations of PF4 were measured in duplicates, interpolated from the PF4 standard curves and corrected for sample dilution. Undiluted samples are as follows: PBMC cell culture supernatant 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PF4 concentration was determined to be 19.25 ng/mL in PBMC cell culture supernatant.



0.5% Serum from ten individual healthy human female donors was measured in duplicate.





0.5% Serum from ten individual healthy human male donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PF4 concentration was determined to be 104.38 ng/mL with a range of 27.73-353.63 ng/mL.



To learn more about the advantages of recombinant antibodies see **here**.

(ab189573)

Sandwich ELISA - Human PF4 ELISA Kit (CXCL4)

### Our Abpromise to you: Quality guaranteed and expert technical support

• Replacement or refund for products not performing as stated on the datasheet

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors