abcam

Product datasheet

Human PF4 ELISA Kit, Fluorescent ab229387

CatchPoint® SimpleStep ELISA®

4 Images

Overview

Product name Human PF4 ELISA Kit, Fluorescent

Detection method Fluorescent

Precision

Intra-assay

Sample	n	Mean	SD	CV%
General	7			6.4%

Inter-assay

Sample	n	Mean	SD	CV%
General	3			4.1%

Sample type Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 2 pg/ml

Range 0.005 ng/ml - 20 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	90	89% - 94%
Serum	108	105% - 109%
Hep Plasma	110	105% - 115%
EDTA Plasma	102	89% - 113%
Cit plasma	114	102% - 124%

Assay time 1h 30m

Assay duration	One step assay
Species reactivity	**Reacts with:** Human **Does not react with:** Goat, Cow, Pig
Product overview	PF4 (CXCL4) *in vitro* CatchPoint SimpleStep ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of PF4 (CXCL4) protein in human serum, plasma and cell culture supernatants. This CatchPoint SimpleStep ELISA kit has been **optimized for Molecular Devices Microplate Readers**. Click here for a list of recommended Microplate Readers. If using a Molecular Devices' plate reader supported by SoftMax® Pro software, a preconfigured protocol for these CatchPoint SimpleStep ELISA Kits is available with all the protocol and analysis settings at www.softmaxpro.org. The CatchPoint SimpleStep ELISA employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plater reader at 530/570/590 nm Excitation/Cutoff/Emission.
Notes	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 has a role in inflammation and wound repair by acting as a strong chemoattractant for neutrophils, monocytes, and fibroblasts.
Platform	Pre-coated microplate (12 x 8 well strips)

Properties

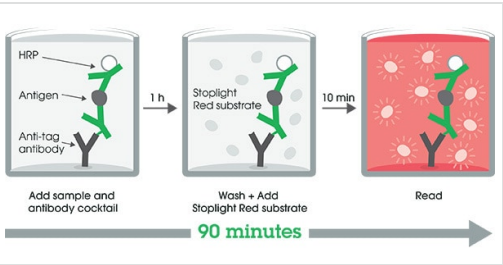
Storage instructions	Store at +4°C. Please refer to protocols.

Components	**1 x 96 tests**
100X Stoplight Red Substrate	1 x 120µl
10X Human PF4 Capture Antibody	1 x 600µl
10X Human PF4 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
500X Hydrogen Peroxide (H_2O_2, 3%)	1 x 50µl
Antibody Diluent CPI	1 x 6ml
Human PF4 Lyophilized Recombinant Protein	2 vials

Components	1 x 96 tests
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

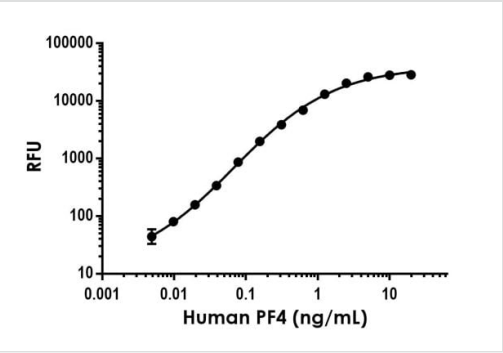
Function	Released during platelet aggregation. Neutralizes the anticoagulant effect of heparin because it binds more strongly to heparin than to the chondroitin-4-sulfate chains of the carrier molecule. Chemotactic for neutrophils and monocytes. Inhibits endothelial cell proliferation, the short form is a more potent inhibitor than the longer form.
Sequence similarities	Belongs to the intercrine alpha (chemokine CxC) family.
Post-translational modifications	Binds non-covalently to a proteoglycan molecule.
Cellular localization	Secreted.

Images



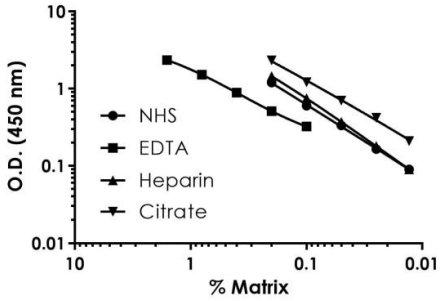
Other - Human PF4 ELISA Kit, Fluorescent (ab229387)

SimpleStep ELISA technology allows the formation of the antibody-antigen 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.



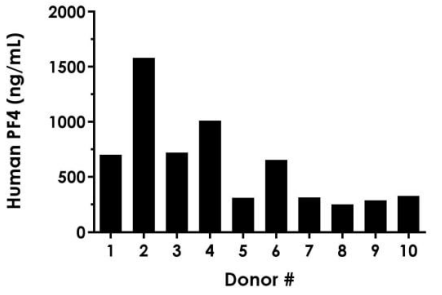
Example of human PF4 (CXCL4) standard curve in Sample Diluent NS.

Background-subtracted data values (mean +/- SD) are graphed.



Titration of Normal Human Serum and Plasma samples within the working range of the assay.

Background-subtracted data values (mean +/- SD, n = 2) are graphed.



Quantitation of PF4 expression in Normal Human Serum from individual donors.

Interpolated values of PF4 are plotted for the indicated sample type multiplied by the dilution factor.

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