

## Product datasheet

# Human PDGF BB ELISA Kit, Fluorescent ab229418

CatchPoint SimpleStep ELISA

[7 Images](#)

### Overview

**Product name** Human PDGF BB ELISA Kit, Fluorescent

**Detection method** Fluorescent

**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			3.3%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			5.3%

**Sample type**

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

**Assay type**

Sandwich (quantitative)

**Sensitivity**

0.65 pg/ml

**Range**

0.69 pg/ml - 1500 pg/ml

**Recovery**

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	104	101% - 106%
Serum	95	85% - 100%
Hep Plasma	104	92% - 114%
EDTA Plasma	99	91% - 107%
Cit plasma	109	100% - 114%

**Assay time**

1h 30m

**Assay duration** One step assay

**Species reactivity** **Reacts with:** Human

**Product overview** PDGF BB *in vitro* CatchPoint SimpleStep ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of PDGF BB protein in human serum, plasma, and cell culture supernatant.

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](http://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 plate reader at 530/570/590 nm Excitation/Cutoff/Emission.

**Notes** Platelet derived growth factor B chain plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. As a homodimer it is a potent mitogen for cells of mesenchymal origin and is required for normal proliferation and recruitment of pericytes and vascular smooth muscle cells in the central nervous system, skin, lung, heart and placenta. PDGF-BB is essential for normal blood vessel development, for normal development of kidney glomeruli and in wound healing. Signaling is modulated by the formation of heterodimers with PDGF A chain to yield PDGF-AB.

**Platform** Pre-coated microplate (12 x 8 well strips)

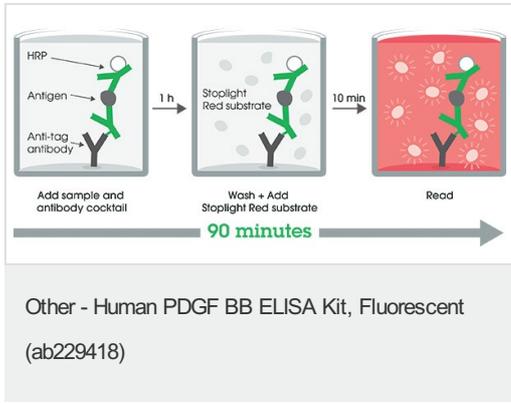
## Properties

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

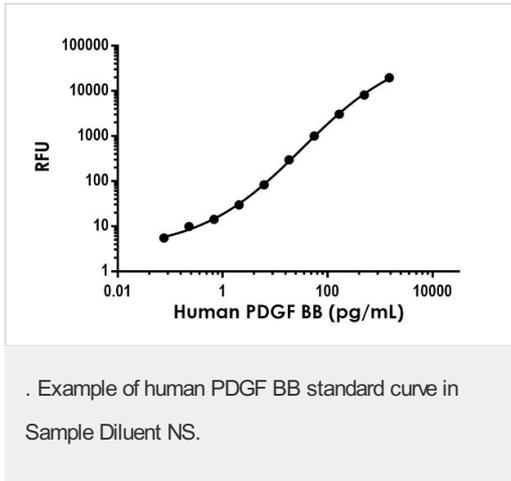
Components	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl
10X Human PDGF BB Capture Antibody	1 x 600µl
10X Human PDGF BB Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl
Antibody Diluent 4BI	1 x 6ml

Components	1 x 96 tests
Human PDGF BB Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

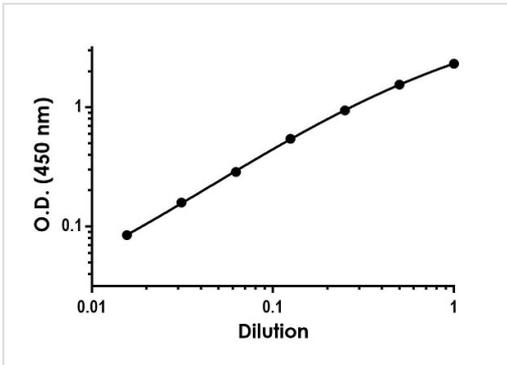
**Images**



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.

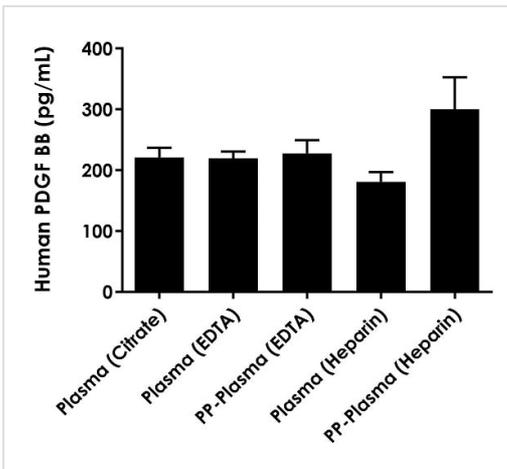


Background-subtracted data values (mean +/- SD) are graphed.



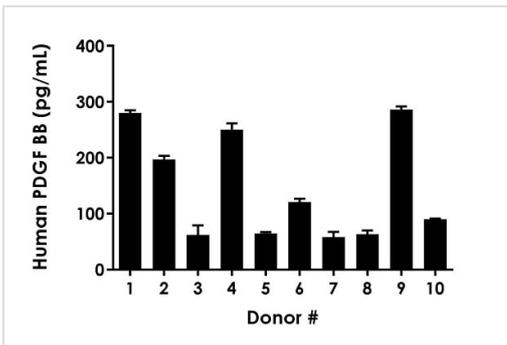
Background subtracted data from duplicate measurements are plotted.

Titration of human serum within the working range of the assay.



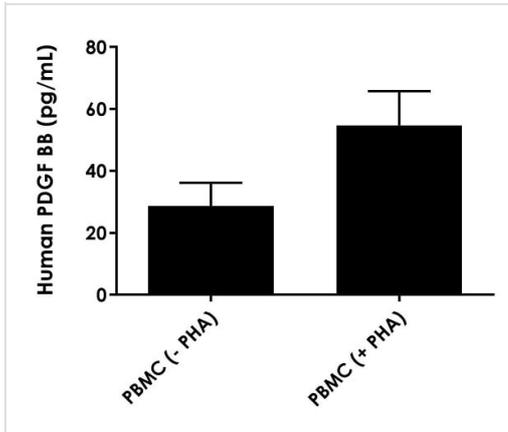
Mean human PDGF-BB values fall within expected normal reference ranges (WHO).

Observed PDGF-BB levels in pooled donor normal human plasma and normal human platelet-poor plasma (PP-Plasma).



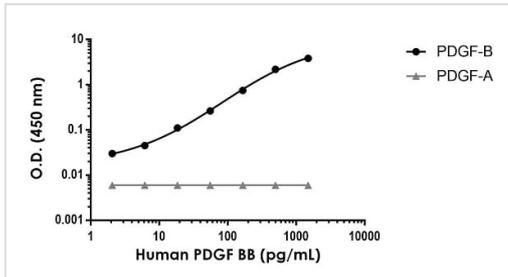
Mean human PDGF-BB is 145 pg/mL and values fall within expected normal reference ranges (WHO).

Observed PDGF-BB levels in individual donor normal Human serum (n=10).



Cells were cultured unstimulated or stimulated with 10 µg/mL PHA. Conditioned media was harvested after 48 hours aliquoted and assayed for endogenous PDGF-BB levels.

Human peripheral blood cells (1x10<sup>6</sup> cells/mL) were cultured in RPMI media supplemented with 10% fetal calf serum, 100 U/mL penicillin, and 100 µg/mL streptomycin sulfate.



Background-subtracted data values (mean +/- SD) are graphed. In addition, PDGF-A was prepared at 15 ng/mL and assayed for cross reactivity. No cross reactivity or interference was observed.

The PDGF-BB SimpleStep ELISA was validated for assay specificity against PDGF-A protein.

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

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