

Product datasheet

Mouse PDGF BB ELISA Kit ab224879

Recombinant SimpleStep ELISA

2 References 9 Images

Overview

Product name Mouse PDGF BB ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Serum	3			4.2%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	5			5.8%

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

Assay type Sandwich (quantitative)

Sensitivity 1.9 pg/ml

Range 9.375 pg/ml - 600 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Serum	111	104% - 115%
Cell culture media	92	91% - 93%
Hep Plasma	102	97% - 106%
EDTA Plasma	101	94% - 111%
Cit plasma	109	104% - 115%

Assay time 1h 30m

Assay duration One step assay

**Species reactivity****Reacts with:** Mouse**Product overview**

Mouse PDGF BB ELISA Kit (ab224879) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of PDGF BB protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse PDGF BB with 1.9 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 ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Notes**

PDGF B (Platelet derived growth factor B) 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)

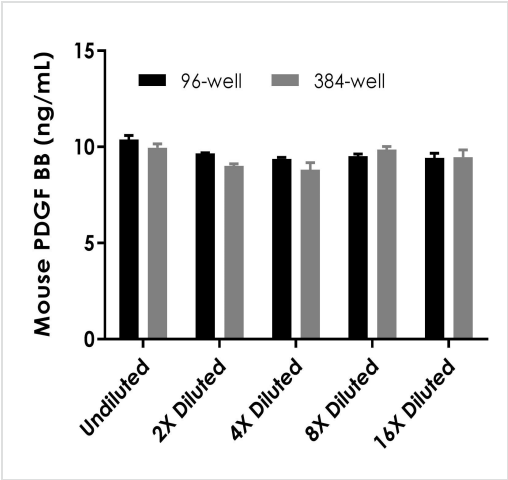
**Properties****Storage instructions**

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

Components	1 x 96 tests	1 x 384 tests	1 x 96 tests
10X Mouse PDGF BB Capture Antibody	1 x 600µl	1 x 600µl	1 x 600µl
10X Mouse PDGF BB Detector Antibody	1 x 600µl	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml	1 x 20ml
384 well CaptSure™ microplates	0 x 0 unit	1 unit	0 x 0 unit
Antibody Diluent CPR2	1 x 6ml	1 x 6ml	1 x 6ml
Mouse PDGF BB Lyophilized Recombinant Protein	2 vials	2 vials	2 vials
Plate Seals	1 unit	1 unit	1 unit

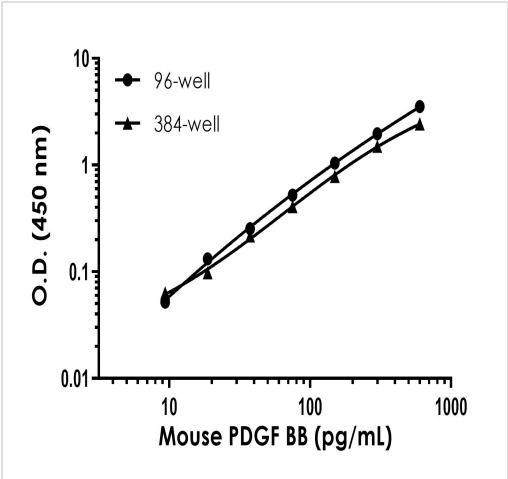
Components	1 x 96 tests	1 x 384 tests	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml	1 x 100ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	0 x 0 unit	1 unit
Stop Solution	1 x 12ml	2 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	2 x 12ml	1 x 12ml

Images



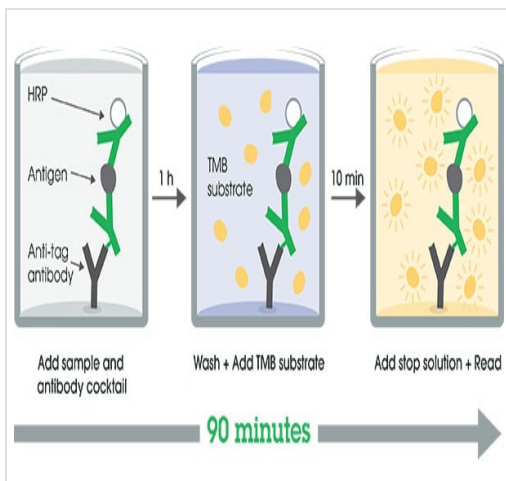
Interpolated concentration of native PDGF BB was measured in duplicate at different sample concentrations in 96-well vs. 384-well plates. Undiluted samples are 4% serum. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). Sample dilutions are made in Sample Diluent NS.

Sandwich ELISA - Mouse PDGF BB ELISA Kit (ab224879)



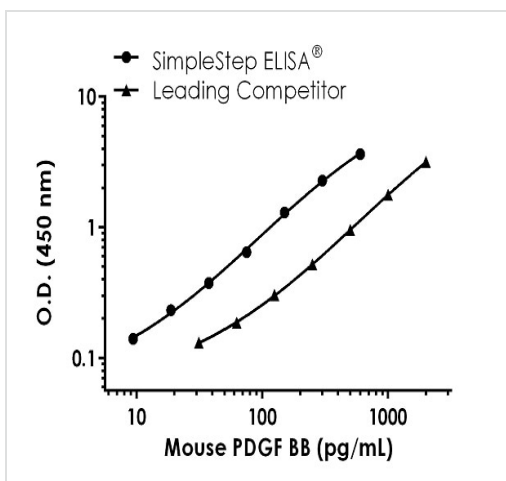
Example of mouse PDGF BB standard curve in 96-well vs. 384-well plate. Background-subtracted data values (mean +/- SD) are graphed.

Sandwich ELISA - Mouse PDGF BB ELISA Kit (ab224879)



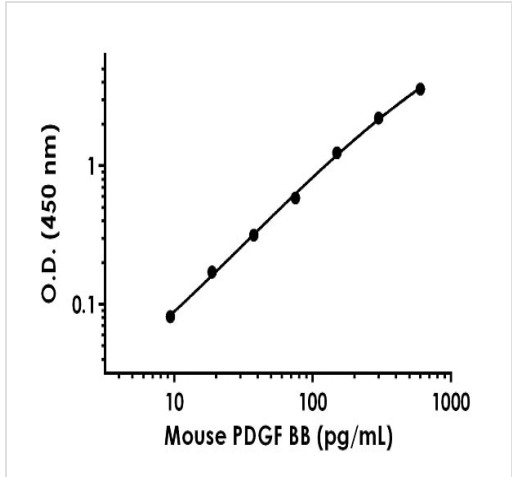
Other - Mouse PDGF BB ELISA Kit (ab224879)

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.



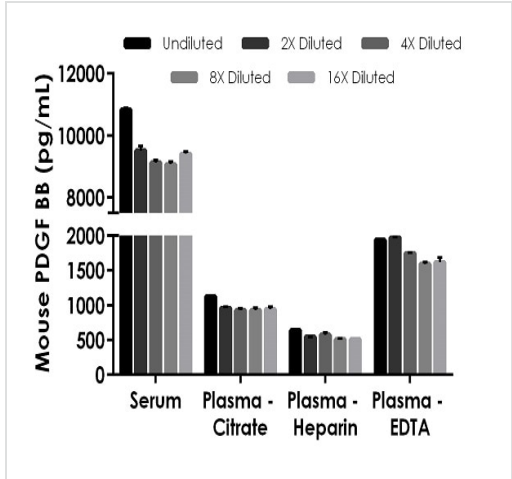
Mouse PDGF BB Competitor standard curve comparison

Standard curve comparison between Mouse PDGF BB SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



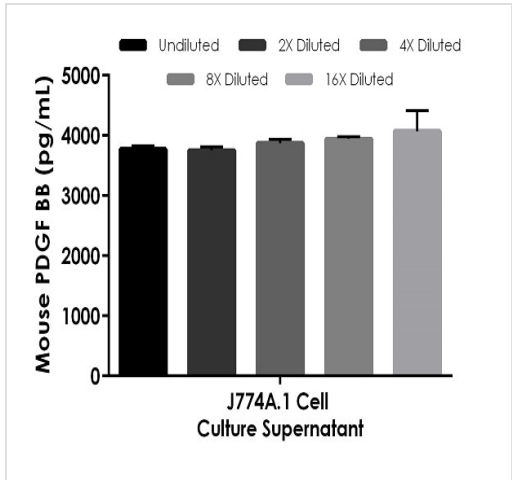
Background-subtracted data values (mean  $\pm$  SD) are graphed.

Example of mouse PDGF BB standard curve in Sample Diluent NS.



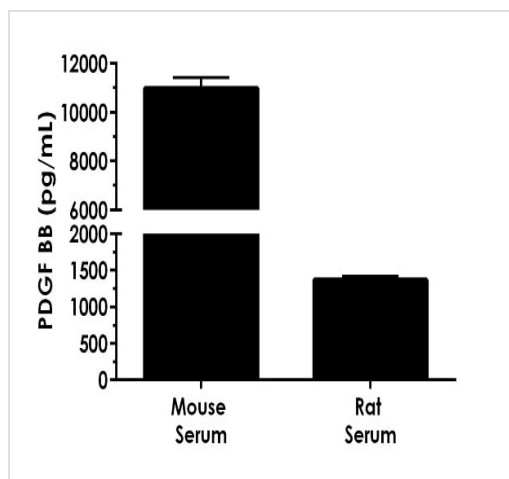
The concentrations of PDGF BB were measured in duplicates, interpolated from the PDGF BB standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 4%, plasma (citrate) 25%, plasma (heparin) 25% and plasma (EDTA) 25%. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean PDGF BB concentration was determined to be 9591 pg/mL in neat serum, 976.9 pg/mL in neat plasma (citrate), 555.5 pg/mL in neat plasma (heparin), and 1773 pg/mL in neat plasma (EDTA).

Interpolated concentrations of native PDGF BB in mouse serum and plasma samples.



The concentrations of PDGF BB were measured in duplicates, interpolated from the PDGF BB standard curves and corrected for sample dilution. Undiluted samples are as follows: J774A.1 cell culture supernatant 12.5%. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean PDGF BB concentration was determined to be 3882 pg/mL in neat J774A.1 cell culture supernatant.

Interpolated concentrations of native PDGF BB in mouse LPS stimulated J774A.1 cell culture supernatant (72 hours) samples.



Other species reactivity was determined.

Other species reactivity was determined by measuring 4% rat serum samples, interpolating the protein concentrations from the mouse standard curve, and expressing the interpolated concentrations as a percentage of the protein concentration in mouse serum assayed at the same dilution. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean PDGF BB concentration was determined to be 10,988 pg/mL in neat mouse serum and 1368.2 pg/mL in neat rat serum. Reactivity with rat serum was determined to be 12%.

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Sandwich ELISA - Mouse PDGF BB ELISA Kit  
(ab224879)

To learn more about the advantages of recombinant antibodies see [here](#).

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

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