

## Anti-Human PDGF-BB Antibody [PSH05-98] - BSA and Azide free (Capture)

# HA722497



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	ELISA(Cap)
<b>Molecular Wt:</b>	Predicted band size: 27 kDa
<b>Clone number:</b>	PSH05-98

**Description:** Growth factor that plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. Potent mitogen for cells of mesenchymal origin. Required for normal proliferation and recruitment of pericytes and vascular smooth muscle cells in the central nervous system, skin, lung, heart and placenta. Required for normal blood vessel development, and for normal development of kidney glomeruli. Plays an important role in wound healing. Signaling is modulated by the formation of heterodimers with PDGFA. A form of basal ganglia calcification, an autosomal dominant condition characterized by symmetric calcification in the basal ganglia and other brain regions. Affected individuals can either be asymptomatic or show a wide spectrum of neuropsychiatric symptoms, including parkinsonism, dystonia, tremor, ataxia, dementia, psychosis, seizures, and chronic headache. Serum levels of calcium, phosphate, alkaline phosphatase and parathyroid hormone are normal. The neuropathological hallmark of the disease is vascular and pericapillary calcification, mainly of calcium phosphate, in the affected brain areas.

**Immunogen:** Recombinant protein within Human PDGF-B aa 82-190.

**Positive control:** Recombinant standard Human PDGF-BB protein (HA210859).

**Subcellular location:** Secreted.

**Database links:** SwissProt: P01127 Human

**Recommended Dilutions:**

**ELISA(Cap)** Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH05-99] to Human PDGF-BB (Detecor) (HA722498) and recombinant standard Human PDGF-BB protein (HA210859) as the standard. The reference range value is 30.9-2500 pg/ml.

**Storage Buffer:** PBS (pH7.4).

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

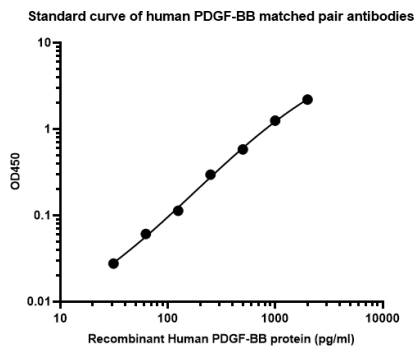
Service mail:support@huabio.cn

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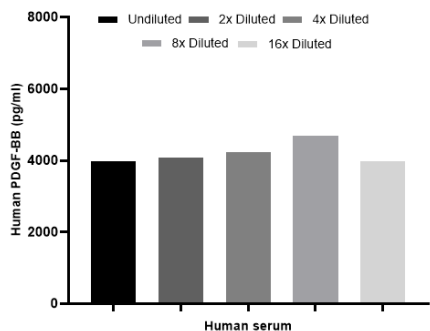
Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

**Fig1:** Sandwich ELISA analysis of Human PDGF-BB matched pair antibodies

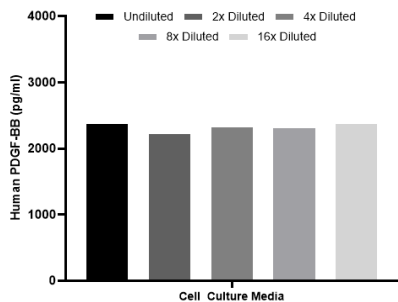


Elisa assay was performed by coating wells of a 96-well plate with 100  $\mu$ l per well of capture antibody (HA722497) diluted in carbonate/bicarbonate buffer, at a concentration of 5  $\mu$ g/ml overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 150  $\mu$ l 0.05% tween-20 1%BSA blocking buffer, and incubated with serial diluted Recombinant standard Human PDGF-BB Protein(HA210859) starting from 2000 pg/ml to 0 pg/ml and detect antibody (HA722498, Biotin, 0.2  $\mu$ g/ml) for 1 hour at 30 $^{\circ}$ C with shaking. Then the plate was washed and incubated with 100  $\mu$ l per well of SA-HRP for 0.5 hour at 30 $^{\circ}$ C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.



**Fig2:** Interpolated concentrations of native PDGF-BB in serum sample.

Interpolated concentration of native PDGF-BB was measured in duplicate at different sample concentrations. Undiluted samples were 50% serum. The interpolated dilution factor corrected values were plotted (mean  $\pm$  SD, n=2).



**Fig3:** Interpolated concentrations of spiked PDGF-BB in human cell culture media 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: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2).

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**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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### Background References

1. Vanlandewijck M., Lebouvier T., Andaloussi Mae M., Nahar K., Hornemann S., Kenkel D., Cunha S.I., Lennartsson J., Boss A., Betsholtz C. Functional characterization of germline mutations in PDGFB and PDGFRB in primary familial brain calcification. PLoS ONE 10:E0143407-E0143407 (2015)
2. Keller A., Westenberger A., Sobrido M.J., Garcia-Murias M., Domingo A., Sears R.L., Lemos R.R., Ordonez-Ugalde A., Nicolas G., Oliveira J.R. Mutations in the gene encoding PDGF-B cause brain calcifications in humans and mice. Nat. Genet. 45:1077-1082 (2013)

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