

Biotin Conjugated Anti-Human PDGFR alpha Antibody [PSH26-34] - Detector HA725516B



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Det), ELISA
Clone number:	PSH26-34

Description: Platelet-derived growth factor (PDGF) is a mitogen for mesenchyme- and glia-derived cells. PDGF consists of two chains, A and B, which dimerize to form functionally distinct isoforms, PDGF-AA, PDGF-AB and PDGF-BB. These three isoforms bind with different affinities to two receptor types, PDGFR- α and - β , which are endowed with protein tyrosine kinase domains. PDGFR- α can bind to both A and B subunits of PDGF, while PDGFR- β can only bind the B subunit. Ligand binding promotes either homo- or heterodimerization of the PDGF receptors in a specific manner. PDGF-AA induces the dimerization of two α receptors, PDGF-AB induces dimerization of $\alpha\alpha$ and $\alpha\beta$ and PDGF-BB induces the formation of three types of dimers, $\alpha\alpha$, $\alpha\beta$ and $\beta\beta$. Translocation of the PDGFR- β gene with the Tel gene is linked to chronic myelomonocytic leukemia (CMML), a myelodysplastic syndrome, and demonstrates the oncogenic potential of the PDGF receptors.

Conjugate:	Biotin-conjugated
Immunogen:	Recombinant protein within Human PDGFR alpha aa 24-528 (HA211519).
Positive control:	Recombinant Human PDGFR alpha protein (HA211519).
Subcellular location:	Cell membrane, Cell projection, cilium, Golgi apparatus.
Database links:	SwissProt: P16234 Human

Recommended Dilutions:
ELISA(Det) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH26-33] to Human PDGFR alpha (Capture) (HA725515) and Recombinant Human PDGFR alpha protein (HA211519) as the standard. The reference range value is 19.5-5,000 pg/mL.
ELISA Use at an assay dependent concentration.

Storage Buffer:	1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.05% Proclean 300.
Storage Instruction:	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term.
Purity:	Protein A affinity purified.

Hangzhou Huan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

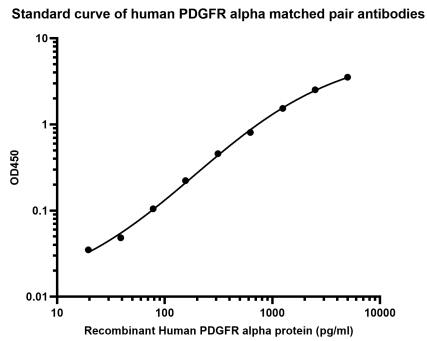
Service mail:support@huabio.cn

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Fig1: Sandwich ELISA analysis of Human PDGFR alpha matched pair antibodies

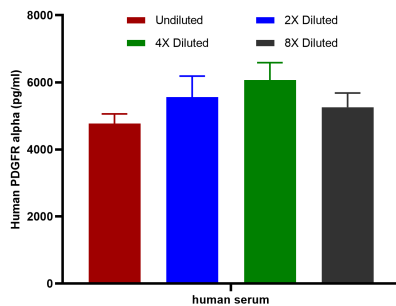
Capture: HA725515, Human PDGFR alpha Rabbit mAb [PSH26-33]

Detector: HA725516, Human PDGFR alpha Rabbit mAb [PSH26-34]



Elisa assay was performed by coating wells of a 96-well plate with 100 μ l per well of capture antibody (HA725515) diluted in carbonate/bicarbonate buffer, at a concentration of 2 μ g/mL overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 150 μ l 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human PDGFR alpha protein (HA211519) starting from 5,000 pg/mL to 0 pg/mL and detect antibody (HA725516, Biotin, 0.2 μ g/mL) for 1 hour at 30 $^{\circ}$ C with shaking. Then the plate was washed and incubated with 100 μ 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 PDGFR alpha in human serum samples.



Capture: HA725515, Human PDGFR alpha Rabbit mAb [PSH26-33]

Detector: HA725516, Human PDGFR alpha Rabbit mAb [PSH26-34]

The concentrations of PDGFR alpha were measured in duplicates, interpolated from the PDGFR alpha standard curve and corrected for sample dilution. Undiluted samples are human serum 25%. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2). The mean PDGFR alpha concentration was determined to be 5,414 pg/mL in human serum.

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

Background References

1. Zhang W et al. Immunohistochemical analysis of PDGFR-alpha for wound age determination. *Int J Legal Med.* 2024 Jul
2. Wang J et al. PDGFR-alpha shRNA-polyplex for uveal melanoma treatment via EMT mediated vasculogenic mimicry interfering. *J Nanobiotechnology.* 2024 Dec

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