



Rabbit Anti-PDGF-A antibody

SL10073R

Product Name:	PDGF-A
Chinese Name:	血小板源性生长因子A抗体
Alias:	Platelet-derived growth factor-1; PDGFA; PDGF AA; PDGF-AA; PDGF A chain; PDGF subunit A; PDGF-1; PDGF1; PDGFA; PDGFA_HUMAN; Platelet derived growth factor A chain precursor; Platelet derived growth factor alpha polypeptide; Platelet-derived growth factor A chain; Platelet-derived growth factor alpha polypeptide; Platelet-derived growth factor subunit A.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PDGF-A:171-270/213
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Platelet-derived growth factor is a potent mitogen for cells of mesenchymal origin. Binding of this growth factor to its affinity receptor elicits a variety of cellular responses. It is released by platelets upon wounding and plays an important role in

stimulating adjacent cells to grow and thereby heal the wound. Antiparallel disulfide-linked dimer of nonidentical (A and B) chains. Homodimers of A and B chains are implicated in transformation processes. The long form contains a basic insert which acts as a cell retention signal. A-A and B-B, as well as A-B, dimers can bind to the PDGF receptor. It belongs to the PDGF/VEGF growth factor family.

Function:

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 lung alveolar septum formation during embryogenesis, normal development of the gastrointestinal tract, normal development of Leydig cells and spermatogenesis. Required for normal oligodendrocyte development and normal myelination in the spinal cord and cerebellum. Plays an important role in wound healing. Signaling is modulated by the formation of heterodimers with PDGFB.

Subunit:

Homodimer; antiparallel disulfide-linked dimer. Heterodimer with PDGFB; antiparallel disulfide-linked dimer. The PDGFA homodimer interacts with PDGFRA homodimers, and with heterodimers formed by PDGFRA and PDGFRB. The heterodimer composed of PDGFA and PDGFB interacts with PDGFRA homodimers, and with heterodimers formed by PDGFRA and PDGFRB. Interacts with CSPG4.

Subcellular Location:

Secreted. Note=Released by platelets upon wounding.

Tissue Specificity:

Platelet-derived growth factor is a potent mitogen for cells of mesenchymal origin. Binding of this growth factor to its receptor elicits a variety of cellular responses. It is released by platelets upon wounding and plays an important role in stimulating adjacent cells to grow and thereby heals the wound.

Similarity:

Belongs to the PDGF/VEGF growth factor family.

SWISS:

P01127

Gene ID:

5154

Database links:

[Entrez Gene: 5154](#)Human

[Entrez Gene: 5155](#)Human

[Entrez Gene: 18590](#)Mouse

[Entrez Gene: 18591](#)Mouse

[Entrez Gene: 24628](#)Rat

[Entrez Gene: 25266](#)Rat

[Omim: 173430](#)Human

[Omim: 190040](#)Human

[SwissProt: P01127](#)Human

[SwissProt: P04085](#)Human

[SwissProt: P20033](#)Mouse

[SwissProt: P31240](#)Mouse

[SwissProt: P28576](#)Rat

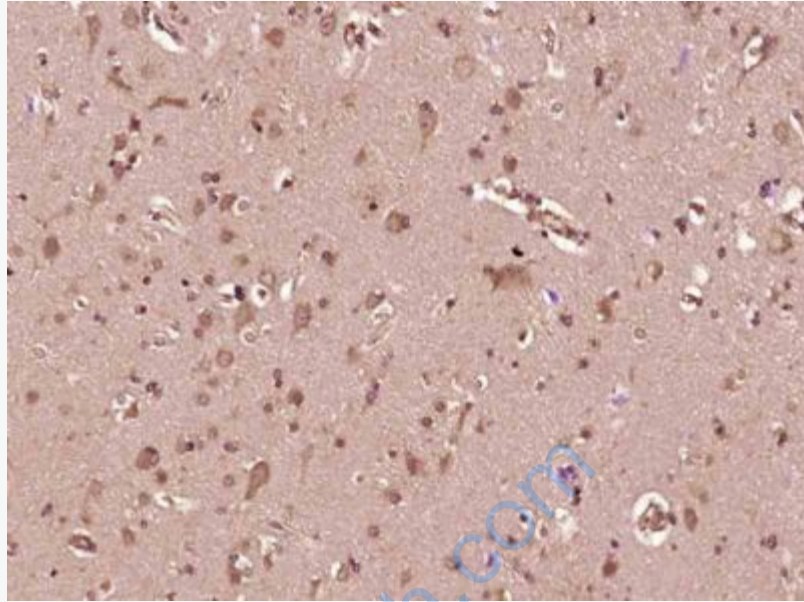
[SwissProt: Q05028](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

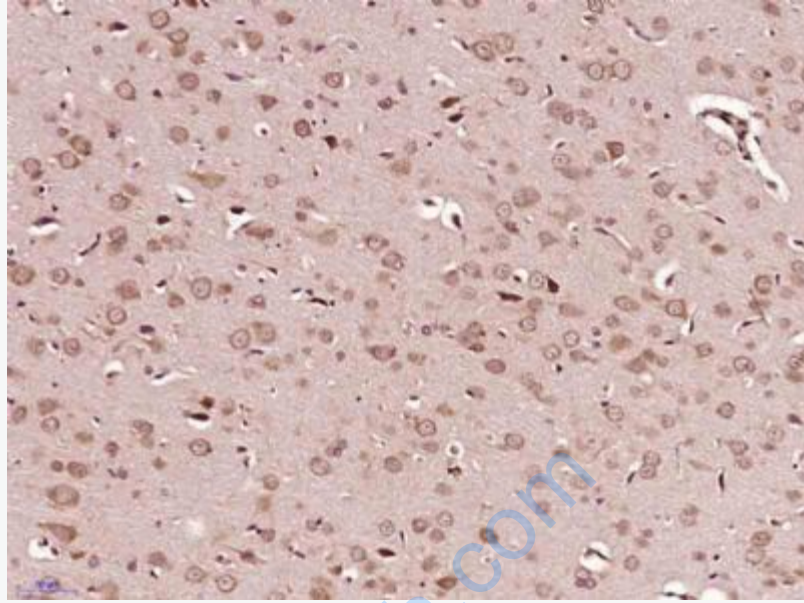
PDGF-A (platelet-derived growth factor-A) 是一种碱性蛋白, pdgf促进细胞分裂、增值同时, 可诱导c-fos、c-myc等蛋白表达增强。

主要作用: 参与组织和血管修复、促进平滑肌细胞、成纤维细胞迅速增值。分子量为28-35kDa, 分为两个亚基(A、B链)通过二硫键结合而成的两条多肽链的异二聚体。最新研究发现了PDGF家族两种新的基因PDGF-C、PDGF-D。

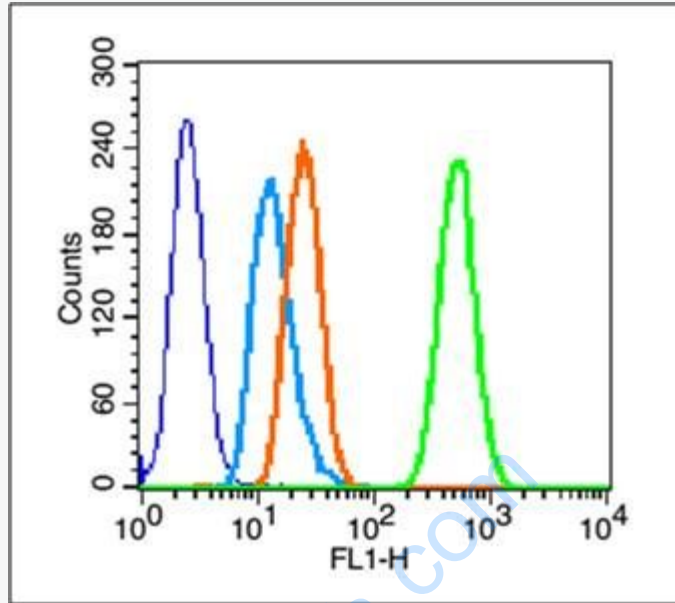


Picture:

Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PDGF-A) Polyclonal Antibody, Unconjugated (SL10073R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PDGF-A) Polyclonal Antibody, Unconjugated (SL10073R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): A431 cells (fixed with 70% methanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C).

Primary Antibody (green line): Rabbit Anti-PDGF-A antibody (SL10073R), Dilution: 0.2µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC, dilution: 1µg /test.