

Rabbit Anti-PDGF-B antibody

SL0185R

Product Name PDGF-B

Chinese Name 血小板源性生长因子-B 抗体

Alias PDGF beta; PDGF-B; Platelet-derived growth factor B-chain; PDGF AB + BB; Becaplermin; c sis; FLJ1285; Oncogene SIS; PDGF 1; PDGF 2; PDGF A; PDGF A chain; PDGF B chain; PDGF subunit A; PDGF subunit B; PDGF1; PDGF2; PDGFA; PDGFB; PDGFR1; Platelet derived growth factor 2; Platelet derived growth factor alpha; Platelet derived growth factor alpha chain; Platelet derived growth factor alpha polypeptide; Platelet derived growth factor B chain; Platelet derived growth factor beta; Platelet derived growth factor beta polypeptide; Platelet derived growth factor subunit A; Platelet derived growth factor subunit B; SIS; SSV; v sis platelet derived growth factor beta polypeptide.

Research Area Cardiovascular Signal transduction Growth factors and hormones

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat, (predicted: Dog, Cow, Horse, Rabbit, Sheep,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1µg/Test
(Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 27kDa

Cellular localization The nucleus cytoplasmic Secretory protein

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human PDGF-B: 155-210/241

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.



Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed 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. [SUBUNIT] Antiparallel disulfide-linked dimer of nonidentical (A and B) chains. Homodimers of A and B chains are implicated in transformation processes. A-A and B-B, as well as A-B, dimers can bind to the PDGF receptor. Belongs to the PDGF/VEGF growth factor family.
Product Detail	<p>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 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.</p> <p>Subunit: Homodimer; antiparallel disulfide-linked dimer. Heterodimer with PDGFA; antiparallel disulfide-linked dimer. The PDGFB homodimer interacts with PDGFRA and PDGFRB homodimers, and with heterodimers formed by PDGFRA and PDGFRB. The heterodimer composed of PDGFA and PDGFB interacts with PDGFRB homodimers, and with heterodimers formed by PDGFRA and PDGFRB. Interacts with XLKD1.</p> <p>Subcellular Location: Secreted. Note=Released by platelets upon wounding.</p> <p>Tissue Specificity: Expressed at high levels in the heart, brain (sustantia nigra), placenta and fetal kidney. Expressed at moderate levels in the brain (hippocampus), skeletal muscle, kidney and lung.</p> <p>DISEASE: Note=A chromosomal aberration involving PDGFB is found in dermatofibrosarcoma protuberans. Translocation t(17;22)(q22;q13) with PDGFB.</p> <p>Similarity: Belongs to the PDGF/VEGF growth factor family.</p>

SWISS:
P01127

Gene ID:
5155

Database links:

[Entrez Gene: 5155](#) Human

[Entrez Gene: 18591](#) Mouse

[Entrez Gene: 24628](#) Rat

[Omim: 190040](#) Human

[SwissProt: P01127](#) Human

[SwissProt: P31240](#) Mouse

[SwissProt: Q05028](#) Rat

[Unigene: 1976](#) Human

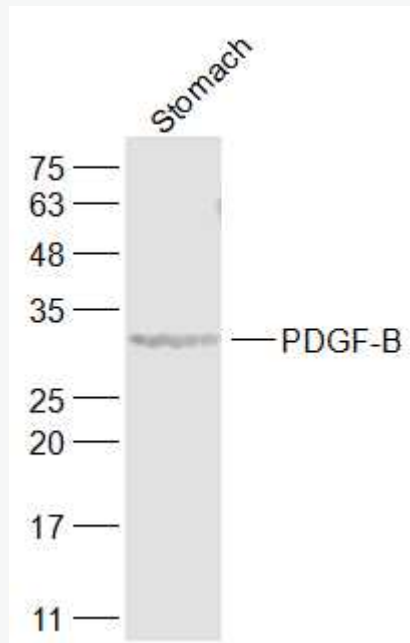
[Unigene: 144089](#) Mouse

[Unigene: 198230](#) Rat

Growth factors and hormones (Growth Factor and Hormones)

PDGF (platelet-derived growth factor) 是一种碱性蛋白, 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, 分子量为 28-35kDa。为促进细胞分裂剂, 可使小鼠成纤维细胞及其他多种细胞增殖。最新研究发现了 PDGF 家族两种新的基因 PDGF-C、PDGF-D。

**Product
Picture**



Sample:

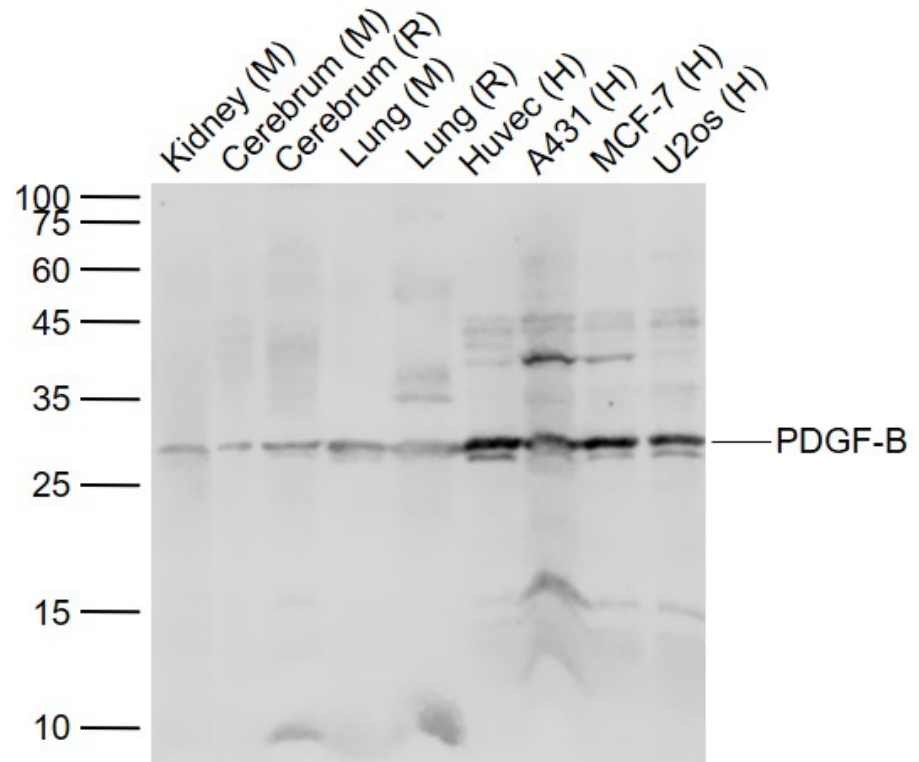
Stomach (Rat) Lysate at 40 ug

Primary: Anti-PDGF-B (SL0185R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 27 kD

Observed band size: 32 kD



Sample:

Lane 1: Kidney (Mouse) Lysate at 40 ug

Lane 2: Cerebrum (Mouse) Lysate at 40 ug

Lane 3: Cerebrum (Rat) Lysate at 40 ug

Lane 4: Lung (Mouse) Lysate at 40 ug

Lane 5: Lung (Rat) Lysate at 40 ug

Lane 6: Huvec (Human) Cell Lysate at 30 ug

Lane 7: A431 (Human) Cell Lysate at 30 ug

Lane 8: MCF-7 (Human) Cell Lysate at 30 ug

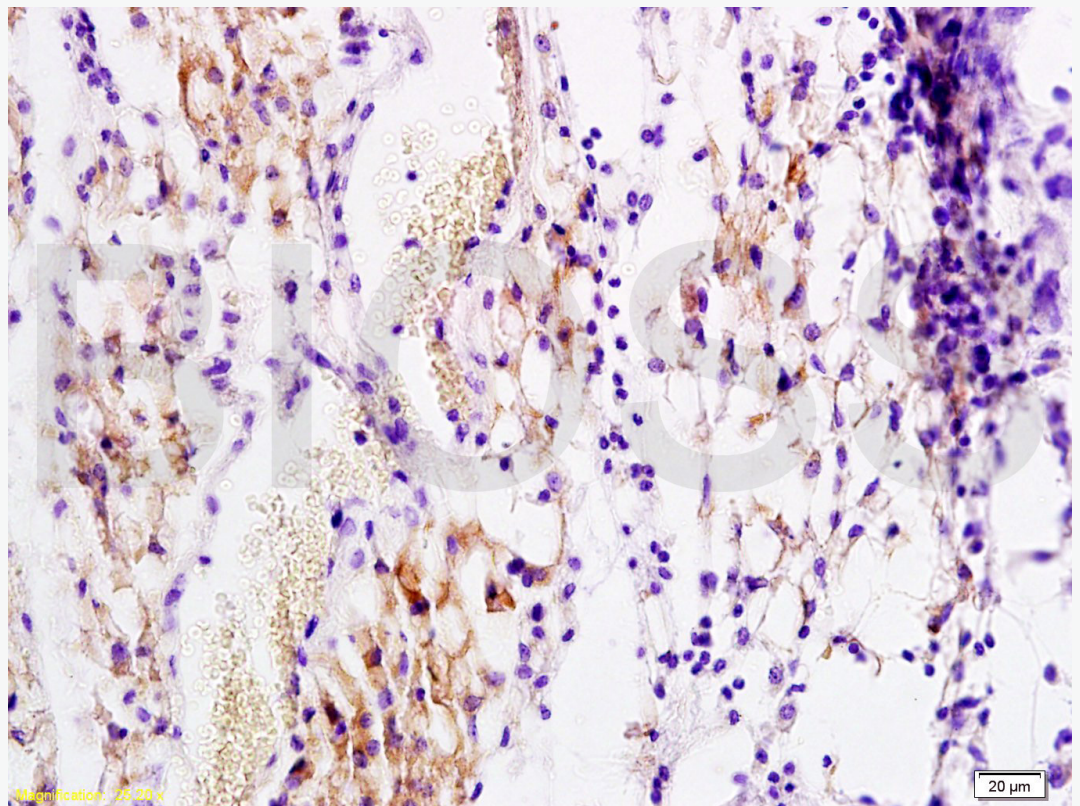
Lane 9: U2os (Human) Cell Lysate at 30 ug

Primary: Anti-PDGF-B (SL0185R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 25 kD

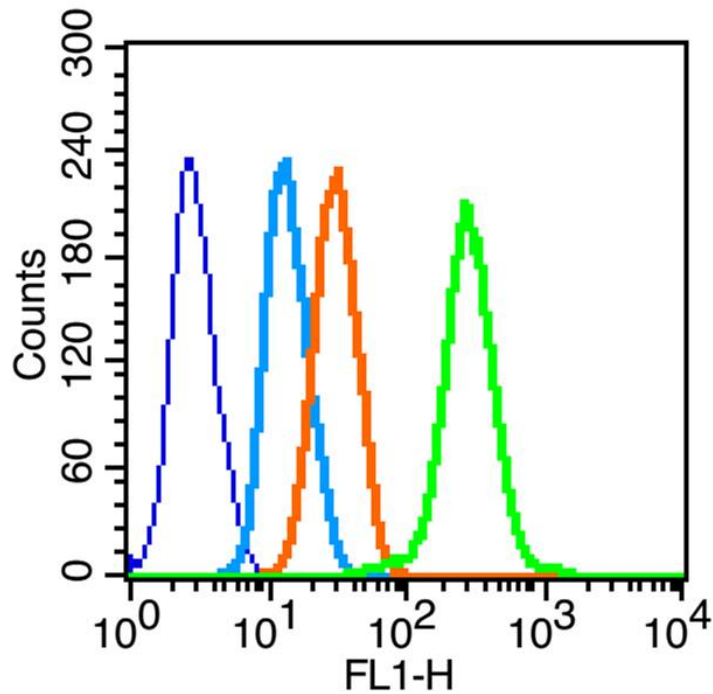
Observed band size: 28 kD



Tissue/cell: rat transplant lymphoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-PDGF-B Polyclonal Antibody, Unconjugated(SL0071R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (blue line):Hela(blue).

Primary Antibody (green line): Rabbit Anti-PDGF-B antibody (SL0185R)

Dilution: 1μg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): F(ab')₂ fragment goat anti-rabbit IgG-FITC

Dilution: 1μg /test.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice.Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.