

Anti-PDGF beta Picoband Antibody

Catalog # ABO10062

Product Information

Application	WB
Primary Accession	P01127
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Platelet-derived growth factor subunit B(PDGFB) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5155
Other Names	Platelet-derived growth factor subunit B, PDGF subunit B, PDGF-2, Platelet-derived growth factor B chain, Platelet-derived growth factor beta polypeptide, Proto-oncogene c-Sis, Becaplermin, PDGFB, PDGF2, SIS
Calculated MW	27283
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human
Subcellular Localization	Secreted. Released by platelets upon wounding.
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. .
Source	Eukaryota
Protein Name	Platelet-derived growth factor subunit B
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PDGF beta (89-129aa AEPAMIAECKTRTEVFEISRRLIDRTNANFLVWPPCQEVQR), different from the related mouse and rat sequences by three amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.

Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
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Protein Information

Name	PDGFB
Synonyms	PDGF2, SIS
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 (PubMed: 26599395). 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 (By similarity).
Cellular Location	Secreted. Note=Released by platelets upon wounding
Tissue Location	Expressed at high levels in the heart, brain (substantia nigra), placenta and fetal kidney. Expressed at moderate levels in the brain (hippocampus), skeletal muscle, kidney and lung

Background

Platelet-derived growth factor subunit B is a protein that in humans is encoded by the PDGFB gene. The protein encoded by this gene is a member of the platelet-derived growth factor family. This gene product can exist either as a homodimer (PDGF-BB) or as a heterodimer with the platelet-derived growth factor alpha polypeptide (PDGF-AB), where the dimers are connected by disulfide bonds. This gene is mapped to 22q13.1. Growth factor plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. This gene plays an important role in wound healing. Signaling is modulated by the formation of heterodimers with PDGFA.

Images

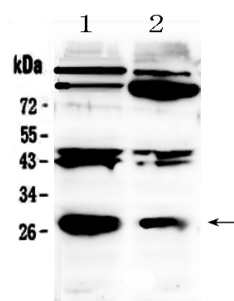


Figure 1. Western blot analysis of PDGF beta using anti-PDGF beta antibody (ABO10062). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- PDGF beta antigen affinity purified polyclonal antibody (Catalog # ABO10062) at 0.5 µg/mL overnight at 4 °C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific

band was detected for PDGF beta at approximately 27KD.
The expected band size for PDGF beta is at 27KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.