

# PDGF-B Antibody

Catalog # ASC11607

## Product Information

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| <b>Application</b>           | WB, IF, E  |
| <b>Primary Accession</b>     | <a href="#">P01127</a>   |
| <b>Other Accession</b>       | <a href="#">NP_002599</a> , <a href="#">4505681</a>                                      |
| <b>Reactivity</b>            | Human, Mouse, Rat  |
| <b>Host</b>                  | Rabbit   |
| <b>Clonality</b>             | Polyclonal   |
| <b>Isotype</b>               | IgG  |
| <b>Calculated MW</b>         | 27283  |
| <b>Concentration (mg/ml)</b> | 1 mg/mL  |
| <b>Conjugate</b>             | Unconjugated   |
| <b>Application Notes</b>     | PDGF-B antibody can be used for detection of PDGF-B by Western blot at 1 - 2 $\mu$ g/mL. |

## Additional Information

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| <b>Gene ID</b>                      | 5155  |
| <b>Other Names</b>                  | 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 |
| <b>Target/Specificity</b>           | PDGFB;  |
| <b>Reconstitution &amp; Storage</b> | PDGF-B antibody can be stored at 4°C for three months and -20°C, stable for up to one year.   |
| <b>Precautions</b>                  | PDGF-B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.   |

## Protein Information

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| <b>Name</b>     | PDGFB  |
| <b>Synonyms</b> | PDGF2, SIS   |
| <b>Function</b> | 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: <a href="#">26599395</a> ). 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

**PDGF-B Antibody:** The platelet-derived growth factor beta (PDGF-B) is a member of the platelet-derived growth factor family. The four members of this family are mitogenic factors for cells of mesenchymal origin and are characterized by a motif of eight cysteines. 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). Mutations in this gene are associated with meningioma, and reciprocal translocations between chromosomes 22 and 7, at sites where the PDGF-B gene and that for COL1A1 are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans.

## References

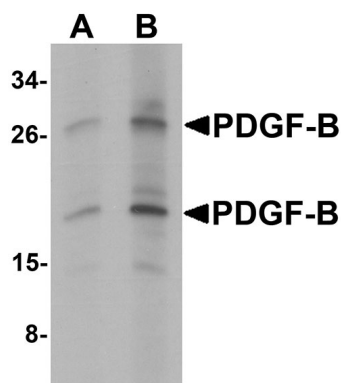
Johnsson A, Heldin CH, Wasteson A, et al. The c-sis gene encodes a precursor of the B chain of platelet-derived growth factor. *EMBO J.* 1984; 3:921-8.

Fredriksson L, Li H, and Eriksson U. The PDGF family: four gene products for five dimeric isoforms. *Cyto. Growth Factor Rev.* 2004; 15:197-204.

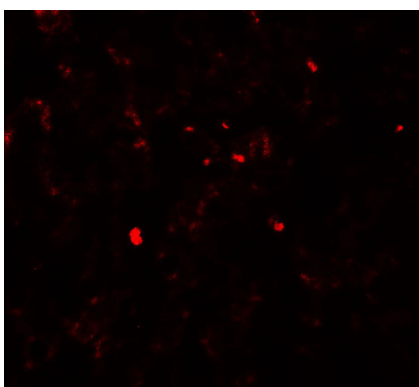
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Simon MP, Navarro M, Roux D, et al. Structural and functional analysis of a chimeric protein COL1A1-PDGFB generated by the translocation t(17;22)(q22;q13.1) in Dermatofibrosarcoma protuberans (DP). *Oncogene* 2001; 20:2965-75.

## Images



Western blot analysis of PDGF-B in rat liver tissue lysate with PDGF-B antibody at (A) 1 and (B) 2  $\mu\text{g/mL}$ .



Immunofluorescence of PDGF-B in human liver tissue with PDGF-B antibody at 20  $\mu\text{g/mL}$ .

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