

PDGFC Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1722a

Specification

PDGFC Antibody (N-term) - Product Information

Application IHC-P, WB,E Primary Accession O9NRA1

Other Accession <u>Q8CI19</u>, <u>Q9I946</u>, <u>Q9UL22</u>

Reactivity Human

Predicted Chicken, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 74-103

PDGFC Antibody (N-term) - Additional Information

Gene ID 56034

Other Names

Platelet-derived growth factor C, PDGF-C, Fallotein, Spinal cord-derived growth factor, SCDGF, VEGF-E, Platelet-derived growth factor C, latent form, PDGFC latent form, Platelet-derived growth factor C, receptor-binding form, PDGFC receptor-binding form, PDGFC, SCDGF

Target/Specificity

This PDGFC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 74-103 amino acids from the N-terminal region of human PDGFC.

Dilution

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PDGFC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PDGFC Antibody (N-term) - Protein Information



Name PDGFC

Synonyms SCDGF

Function Growth factor that plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. Potent mitogen and chemoattractant for cells of mesenchymal origin. Required for normal skeleton formation during embryonic development, especially for normal development of the craniofacial skeleton and for normal development of the palate. Required for normal skin morphogenesis during embryonic development. Plays an important role in wound healing, where it appears to be involved in three stages: inflammation, proliferation and remodeling. Plays an important role in angiogenesis and blood vessel development. Involved in fibrotic processes, in which transformation of interstitial fibroblasts into myofibroblasts plus collagen deposition occurs. The CUB domain has mitogenic activity in coronary artery smooth muscle cells, suggesting a role beyond the maintenance of the latency of the PDGF domain. In the nucleus, PDGFC seems to have additional function.

Cellular Location

Cytoplasm, cytosol. Secreted. Nucleus. Cytoplasmic granule. Cell membrane. Note=Sumoylated form is predominant in the nucleus (PubMed:15247255). Stored in alpha granules in platelets (PubMed:15061151).

Tissue Location

Expressed in the fallopian tube, vascular smooth muscle cells in kidney, breast and colon and in visceral smooth muscle of the gastrointestinal tract. Highly expressed in retinal pigment epithelia. Expressed in medulloblastoma. In the kidney, constitutively expressed in parietal epithelial cells of Bowman's capsule, tubular epithelial cells and in arterial endothelial cells (at protein level) Highly expressed in the platelets, prostate, testis and uterus. Higher expression is observed in uterine leiomyomata. Weaker expression in the spleen, thymus, heart, pancreas, liver, ovary cells and small intestine, and negligible expression in the colon and peripheral blood leukocytes.

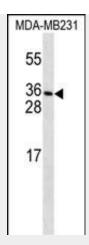
PDGFC Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

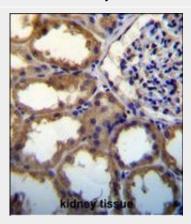
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PDGFC Antibody (N-term) - Images





PDGFC Antibody (T89) (Cat. #AP1722a) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the PDGFC antibody detected the PDGFC protein (arrow).



PDGFC antibody (N-term) (Cat. #AP1722a)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PDGFC antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

PDGFC Antibody (N-term) - Background

Platelet-derived growth factor C (PDGFC) 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. PDGFC seems to form only homodimers, where the dimers are connected by disulfide bonds. It differs from the platelet-derived growth factor alpha (PDGFA) and beta (PDGFB) in having an unusual N-terminal domain, the CUB domain.

PDGFC Antibody (N-term) - References

Fang, L., et al., Arterioscler. Thromb. Vasc. Biol. 24(4):787-792 (2004). Clark, H.F., et al., Genome Res. 13(10):2265-2270 (2003). Eitner, F., et al., J. Am. Soc. Nephrol. 14(5):1145-1153 (2003). Reigstad, L.J., et al., J. Biol. Chem. 278(19):17114-17120 (2003). Zwerner, J.P., et al., Oncogene 21(24):3847-3854 (2002).