Product name:	PDGF-C Rabbit Polyclonal Antibody
Cat number:	ABN15903
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthetic peptide from human protein at AA range: 61-110
Reactivity:	Human,Mouse,Rat
Applications:	IHC 1:50-1:200,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

platelet derived growth factor C(PDGFC) Homo sapiens The protein encoded by this gene 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 core motif of eight cysteines. This gene product appears to form only homodimers. It differs from the platelet-derived growth factor alpha and beta polypeptides in having an unusual N-terminal domain, the CUB domain. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2010],developmental stage:In the fetal kidney, detected in the developing mesangium, ureteric bud epithelium and the undifferentiated mesenchyme (at protein level).,disease:Downstream target of EWSR1 fusion proteins, contributing to the Ewin family tumors (EFT) malignant phenotype.,disease:Expression increased in patients with uterine leiomyoma (UL).,disease:Predominant PDGF isoform present in patients with proliferative vitreoretinopathy (PVR). Plasmin is the major protease that processes PDGFC in the vitreous of PVR patients.,disease:The medulloblastoma phenotype is associated with PDGFR alpha expression and activation, with PDGFC as a major player in such endogenous autocrine loop.,function:Potent mitogen and chemoattractant for cells of mesenchymal origin. Binding of this growth factor to its affinity receptor elicits a variety of cellular responses. Appears to be involved in the three stages of wound healing: inflammation, proliferation and remodeling. Involved in fibrotic processes, in which transformation of interstitial fibroblasts into myofibroblasts plus collagen deposition occurs. Acts as a specific ligand for alpha platelet-derived growth factor receptor homodimer, and alpha and beta heterodimer. Binding to receptors induces their activation by tyrosine phosphorylation. The CUB domain has mitogenic activity in coronary artery smooth muscle cells, suggesting a role beyond the maintainance of the latency of the PDGF domain. In the nucleus, PDGFC seems to have additional function. Seems to be involved in palatogenesis.,induction:Up-regulated by EWS-FLI1 chimeric transcription factor in tumor derived cells. Up-regulated in podocytes and interstitial cells after injury/activation of these cells. FGF2 activates PDGFC transcription via EGR1. Up-regulated by TGFB1 in concert with FGF2.,miscellaneous:A lower molecular weight form (around 43 kDa) is present in patients with papillary thyroid carcinoma.,PTM:N-glycosylated.,PTM:Proteolytic removal of the N-terminal CUB domain releasing the core domain is necessary for unmasking the receptor-binding epitopes of the core domain. Cleavage after basic residues in the hinge region (region connecting the CUB and growth factor domains) gives rise to the receptor-binding form. Cleaved by PLAT and PLG.,PTM:Sumoylated by SUMO1.,similarity:Belongs to the PDGF/VEGF growth factor family.,similarity:Contains 1 CUB domain.,subcellular location:Sumoylated form is predominant in the nucleus. Stored in alpha granules in platelets. Membrane associated when bound to receptors.,subunit:Homodimer; disulfide-linked. Interacts (via CUB domain) with PLAT (via kringle domain).,tissue specificity: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. Weaker expression in the spleen, thymus, heart, pancreas, liver, ovary cells and small intestine, and negligible expression in the colon and peripheral blood leukocytes.,