

Product name:	PDGF-D Rabbit Polyclonal Antibody
Cat number:	ABN15904
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from the C-terminal region of human PDGFD. AA range:311-360
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	42kDa
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 D(PDGFD) 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, seven of which are found in this factor. This gene product only forms homodimers and, therefore, does not dimerize with the other three family members. It differs from alpha and beta members of this family in having an unusual N-terminal domain, the CUB domain. Two splice variants have been identified for this gene. [provided by RefSeq, Jul 2008],developmental stage:Not detectable in the earliest stages of glomerulogenesis, and not detected in the metanephric blastema or surrounding cortical interstitial cells. In later stages of glomerulogenesis, localized to epithelial cells transitioning from the early developing nephrons of the comma- and S-shaped stages to the visceral epithelial cells of differentiated glomeruli. In the developing pelvis, expressed at the basement membrane of immature collecting ducts and by presumptive fibroblastic cells in the interstitium.,function: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 heals the wound. Activated by proteolytic cleavage and this active form acts as a specific ligand for beta platelet-derived growth factor receptor. Induces macrophage recruitment, increased interstitial pressure, and blood vessel maturation during angiogenesis.,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 Arg-247 or Arg-249 by urokinase plasminogen activator gives rise to the active form.,similarity:Belongs to the PDGF/VEGF growth factor family.,similarity:Contains 1 CUB domain.,subunit:Homodimer; disulfide-linked.,tissue specificity:Expressed at high levels in the heart, pancreas, adrenal gland and ovary and at low levels in placenta, liver, kidney, prostate, testis, small intestine, spleen and colon. In the kidney, expressed by the visceral epithelial cells of the glomeruli. A widespread expression is also seen in the medial smooth muscle cells of arteries and arterioles, as well as in smooth muscle cells of vasa rectae in the medullary area. Expressed in the adventitial connective tissue surrounding the suprarenal artery. In chronic obstructive nephropathy, a persistent expression is seen in glomerular visceral epithelial cells and vascular smooth muscle cells, as well as de novo expression by periglomerular interstitial cells and by some neointimal cells of arteriosclerotic vessels. Expression in normal prostate is seen preferentially in the mesenchyme of the gland while expression is increased and more profuse in prostate carcinoma. Expressed in many ovarian, lung, renal and brain cancer-derived cell lines.,