

Rabbit Anti-PDGFC antibody

SL5775R

| Product Name: | PDGFC |
|------------------------|---|
| Chinese Name: | 血小板源性生长因子C抗体 |
| Alias: | receptor-binding form; Fallotein; hSCDGF; PDGF-C; PDGFC; PDGFC latent form; PDGFC receptor-binding form; PDGFC_HUMAN; Platelet derived growth factor C; Platelet-derived growth factor C; SCDGF; Secretory growth factor like protein; Secretory growth factor like protein fallotein; Spinal cord-derived growth factor; VEGF E; VEGF-E. |
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| | Specific References(1) SL5775R has been referenced in 1 publications. |
| 文献引用 | [IF=3.26] Hurley, Marja M., et al. "Accelerated Fracture Healing in Transgenic Mice |
| PubMed | Overexpressing an Anabolic Isoform of Fibroblast Growth Factor 2." Journal of |
| : | Cellular Biochemistry (2015).IHC-P;Mouse. |
| | PubMed:26252425 |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 39kDa |
| Cellular localization: | The nucleuscytoplasmicThe cell membraneSecretory protein |
| Form: | Lyophilized or Liquid |
| Concentration: | lmg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human PDGFC/VEGF E:201-300/345 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |

Storage:

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:

PubMed

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.

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.

Product Detail:

Subunit:

Homodimer; disulfide-linked. Interacts with PDGFRA homodimers, and with heterodimers formed by PDGFRA and PDGFRB. Interacts (via CUB domain) with PLAT (via kringle domain).

Subcellular Location:

Cytoplasm. Secreted. Nucleus. Cytoplasmic granule. Note=Sumoylated form is predominant in the nucleus. Stored in alpha granules in platelets. Membrane associated when bound to receptors.

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. 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.

Post-translational modifications:

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. Sumoylated with SUMO1.

N-glycosylated.

Similarity:

Belongs to the PDGF/VEGF growth factor family. Contains 1 CUB domain.

SWISS:

Q9NRA1

Gene ID:

56034

Database links:

Entrez Gene: 56034Human

Entrez Gene: 54635Mouse

Entrez Gene: 79429Rat

Omim: 608452Human

SwissProt: Q9I946Chicken

SwissProt: Q9NRA1Human

SwissProt: Q8CI19Mouse

SwissProt: Q9EQX6Rat

Unigene: 570855Human

Unigene: 331089Mouse

Unigene: 211987Rat

Important Note:

| This product as supplied is intended for research use only, not for use in human, |
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| therapeutic or diagnostic applications. |

