abcam

Product datasheet

Anti-PDGFC antibody ab93899

2 References 2 Images

Overview

Product name Anti-PDGFC antibody

Description Rabbit polyclonal to PDGFC

Host species Rabbit

Specificity From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch,

please contact our Scientific Support who will be happy to help.

Tested applications Suitable for: ICC/IF, WB

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control This antibody gave a positive signal in Human platelet whole cell lysate.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab93899 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 41 kDa (predicted molecular weight: 39 kDa).

Target

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.

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.

Sequence similarities

Belongs to the PDGF/VEGF growth factor family.

Contains 1 CUB domain.

Developmental stage

In the fetal kidney, detected in the developing mesangium, ureteric bud epithelium and the

undifferentiated mesenchyme (at protein level).

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.

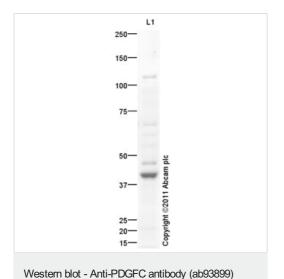
Sumoylated by SUMO1.

N-glycosylated.

Cellular localization

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

Images



Anti-PDGFC antibody (ab93899) at 1 μ g/ml + Human Platelet (Human adult normal cell line) Whole Cell Lysate at 10 μ g

Secondary

Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

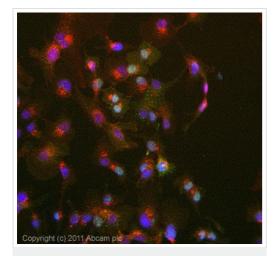
Predicted band size: 39 kDa **Observed band size:** 41 kDa

Additional bands at: 115 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 8 minutes

PDGFC contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunocytochemistry/ Immunofluorescence - Anti-PDGFC antibody (ab93899)

ICC/IF image of ab93899 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab93899 at 1 μ g/ml overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti- rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 μ M.

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