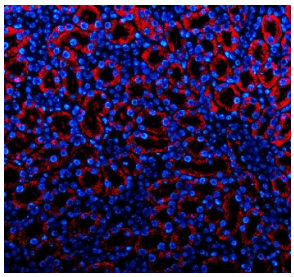
PDGF-D Antibody / Platelet-derived growth factor D (FY13449)

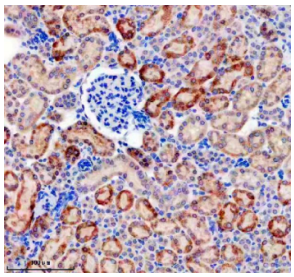
Catalog No.	Formulation	Size
FY13449	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

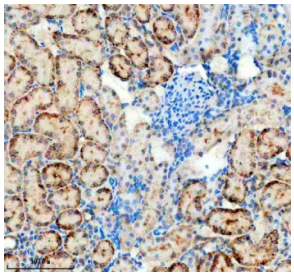
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
UniProt	Q9GZP0
Localization	Cytoplasm
Applications	Western blot: 0.25-0.5ug/ml Immunohistochemistry: 2-5ug/ml Immunofluorescence: 5ug/ml
Limitations	This PDGF-D antibody is available for research use only.



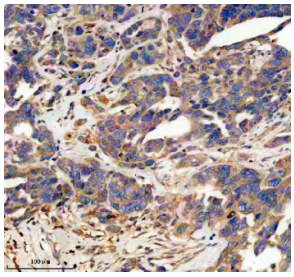
Immunofluorescence analysis of Platelet-derived growth factor D using PDGF-D antibody. Platelet-derived growth factor D expression was examined in a paraffin-embedded section of mouse kidney tissue. Heat-mediated antigen retrieval was performed using EDTA buffer (pH 8.0). Tissue sections were blocked with normal goat serum and incubated with PDGF-D antibody (red) overnight at 4C. Immunoreactivity was visualized using fluorescence detection, and nuclei were counterstained with DAPI (blue).



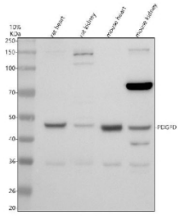
Immunohistochemistry analysis of Platelet-derived growth factor D using PDGF-D antibody. Platelet-derived growth factor D expression was examined in a paraffin-embedded section of mouse kidney tissue. Heat-mediated antigen retrieval was performed using EDTA buffer (pH 8.0). Tissue sections were blocked with normal goat serum and incubated with PDGF-D antibody overnight at 4C. Immunoreactivity was visualized using an HRP-based detection system with DAB chromogen, followed by hematoxylin counterstaining.



Immunohistochemistry analysis of Platelet-derived growth factor D using PDGF-D antibody. Platelet-derived growth factor D expression was examined in a paraffin-embedded section of rat kidney tissue. Heat-mediated antigen retrieval was performed using EDTA buffer (pH 8.0). Tissue sections were blocked with normal goat serum and incubated with PDGF-D antibody overnight at 4C. Immunoreactivity was visualized using an HRP-based detection system with DAB chromogen, followed by hematoxylin counterstaining.



Immunohistochemistry analysis of Platelet-derived growth factor D using PDGF-D antibody.Platelet-derived growth factor D expression was examined in a paraffin-embedded section of human ovarian cancer tissue. Heat-mediated antigen retrieval was performed using EDTA buffer (pH 8.0). Tissue sections were blocked with normal goat serum and incubated with PDGF-D antibody overnight at 4C. Immunoreactivity was visualized using an HRP-based detection system with DAB chromogen, followed by hematoxylin counterstaining.



Western blot analysis of PDGFD using PDGFD antibody.Protein lysates from rat heart (Lane 1), rat kidney (Lane 2), mouse heart (Lane 3), and mouse kidney (Lane 4) were resolved by SDS-PAGE under reducing conditions and transferred to a nitrocellulose membrane. PDGFD was detected as a major band at approximately 43 kDa, corresponding to the predicted molecular weight of the latent monomeric form of Platelet-derived growth factor D. A weaker band at approximately 35 kDa is consistent with proteolytically processed, active PDGFD, while a higher molecular weight band near 75 kDa is consistent with dimeric or incompletely reduced PDGFD species. Detection was performed using an HRP-based secondary antibody and chemiluminescent substrate.

Description

PDGF-D antibody targets Platelet-derived growth factor D, encoded by the PDGFD gene. Platelet-derived growth factor D is an extracellular, secreted growth factor that belongs to the PDGF family of ligands and is best understood as a paracrine regulator of mesenchymal and vascular cell behavior. Unlike many intracellular signaling nodes, PDGF-D exerts its effects from outside the cell, where ligand availability and local activation can determine when and where receptor signaling occurs.

Functionally, Platelet-derived growth factor D contributes to PDGF receptor driven pathways that shape cell motility, proliferation, and survival, particularly in stromal and vascular associated contexts. Because PDGF signaling is a major regulator of pericyte and fibroblast like responses, PDGF-D is frequently studied in models of tissue repair and remodeling where receptor activation promotes matrix associated programs. A PDGF-D antibody supports studies examining growth factor ligand dynamics, receptor activation states, and pathway crosstalk that links extracellular cues to transcriptional and phenotypic changes.

PDGF-D can be expressed in a context dependent manner, including in tissues undergoing remodeling and in disease associated microenvironments where growth factor signals become amplified. Its extracellular localization means PDGF-

D may be evaluated in secretome studies, pericellular fractions, or tissue sections where stromal compartments contribute to ligand production. In vitro, apparent distribution can shift with culture density and the presence of extracellular proteases that influence ligand processing and activation.

From a disease relevance standpoint, Platelet-derived growth factor D has been linked to processes such as angiogenesis, fibroblast activation, and fibrotic progression, and it is commonly evaluated in oncology research where stromal growth factor signaling supports invasion permissive niches. In these settings, PDGF-D is often considered alongside other PDGF ligands as part of a coordinated axis that impacts vascular maturation, extracellular matrix organization, and tumor-stroma communication. These roles make PDGF-D a useful marker and mechanistic target in studies connecting growth factor signaling to tissue architecture changes.

At the molecular level, Platelet-derived growth factor D is produced as a precursor that can be modified by extracellular processing events, which can influence functional signaling output and experimental detectability across sample types. This biology emphasizes the importance of considering context when interpreting PDGF-D measurements across lysates, conditioned media, and tissue derived preparations. PDGF-D antibody reagents support research into growth factor signaling and remodeling pathways, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the PDGF-D antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human Platelet-derived growth factor D was used as the immunogen for the PDGF-D antibody.

Storage

After reconstitution, the PDGF-D antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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