

Anti-PDGF Receptor alpha/PDGFR α Antibody Picoband®

Catalog Number: PB9771

About PDGFRA

PDGFRA (Platelet-derived growth factor receptor, alpha), also called PDGFR2, encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. The PDGFA gene is mapped on 4q12. The PDGFRA-FIP1L1 gene is a constitutively activated tyrosine kinase that transforms hematopoietic cells and is a therapeutic target of imatinib. And the PDGFRA gene contains 23 exons spanning about 65 kb. Using the human PDGFRA promoter linked to a luciferase reporter, Joosten et al. showed that PAX1 acts as a transcriptional activator of the PDGFRA gene in differentiated human embryonal carcinoma cells. PDGFRA is responsible for mediating cellular contraction of multiple growth factors: TGF β 1 and members of the PDGF family. Lei et al. noted that in the rabbit model of the disease, PDGFRA is dramatically more capable of promoting PVR than is the closely related PDGFRB. PDGFRA is a critical receptor required for human CMV infection, and thus a target for novel antiviral therapies.

Overview

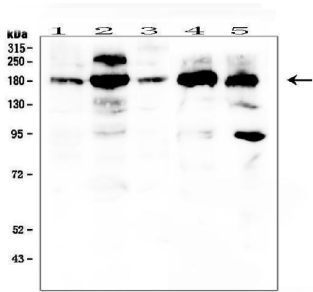
Product Name	Anti-PDGF Receptor alpha/PDGFR α Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PDGF Receptor alpha/PDGFR α Antibody Picoband® catalog # PB9771. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P16234

Technical Details

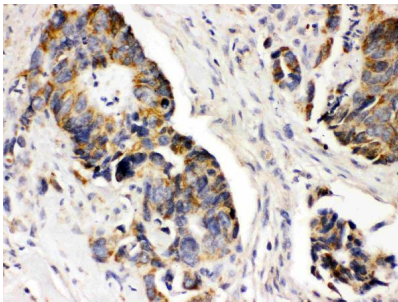
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PDGFRA, identical to the related mouse sequence, and different from the related rat sequence by one amino acid.
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Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

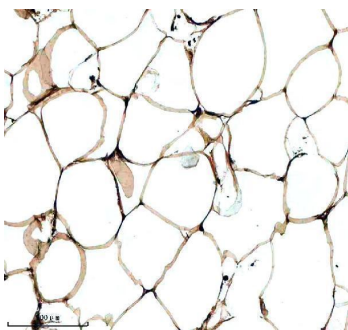
Anti-PDGFR Receptor alpha/PDGFR α Antibody Picoband $^{\text{®}}$ (PB9771) Images



Western blot analysis of PDGFRA using anti-PDGFR α antibody (PB9771). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HT1080 whole cell lysates, Lane 2: human Caco-2 whole cell lysates, Lane 3: human U20S whole cell lysates, Lane 4: human PC-3 whole cell lysates, Lane 5: human 293T whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PDGFR α antigen affinity purified polyclonal antibody (Catalog # PB9771) at 0.5 ug/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PDGFRA at approximately 123KD. The expected band size for PDGFRA is at 180KD.

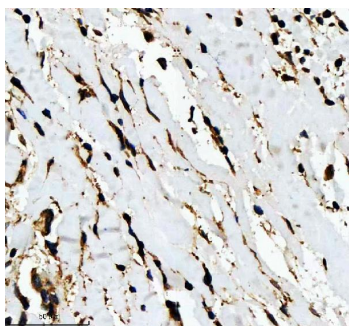


IHC analysis of PDGFRA using anti-PDGFR α antibody (PB9771). PDGFRA was detected in paraffin-embedded section of Human Intestinal Cancer Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PDGFR α Antibody (PB9771) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

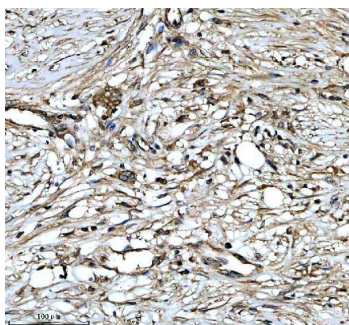


IHC analysis of PDGFRA using anti-PDGFR α antibody (PB9771). PDGFRA was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-PDGFR α Antibody (PB9771) overnight at 4 $^{\circ}$ C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IHC analysis of PDGFRA using anti-PDGFR α antibody (PB9771). PDGFRA was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated



antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-PDGFR α Antibody (PB9771) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of PDGFRA using anti-PDGFR α antibody (PB9771). PDGFRA was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-PDGFR α Antibody (PB9771) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

3 Publications Citing This Product

1. PubMed ID: 10.1016/j.celrep.2018.10.063, Janus Kinase 1 Plays a Critical Role in Mammary Cancer Progression
2. PubMed ID: 27446356, Label-retaining assay enriches tumor-initiating cells in glioblastoma spheres cultivated in serum-free medium
3. PubMed ID: 29140299, PDGFR α regulated by miR-34a and FoxO1 promotes adipogenesis in porcine intramuscular preadipocytes through Erk signaling pathway

Visit bosterbio.com/anti-pdgfra-picoband-trade-antibody-pb9771-boster.html to see all 3 publications.

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Anti-PDGF Receptor alpha/PDGFR α Antibody

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