

Rabbit PDGFRalpha Polyclonal Antibody | anti-PDGFRα antibody

PDGFRalpha Antibody

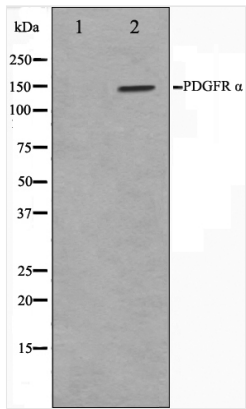
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA320882	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PDGFRalpha; Polyclonal Antibody; PDGFRalpha Antibody; Alpha-type platelet-derived growth factor receptor; CD140 antigen-like family member A; CD140a; CD140a antigen; MGC74795; PDGF alpha chain; PDGF-R-alpha; PDGFR 2; PDGFR alpha; PDGFR2; PDGFRA; PDGFRA/BCR fusion; PGFRA_HUMAN; Platelet derived growth factor receptor 2; Platelet derived growth factor receptor alpha; Platelet derived growth factor receptor alpha polypeptide; Platelet derived growth factor receptor; Rearranged in hypereosinophilia platelet derived growth factor receptor alpha fusion protein; RHEPDGFRA; anti-PDGFRα antibody

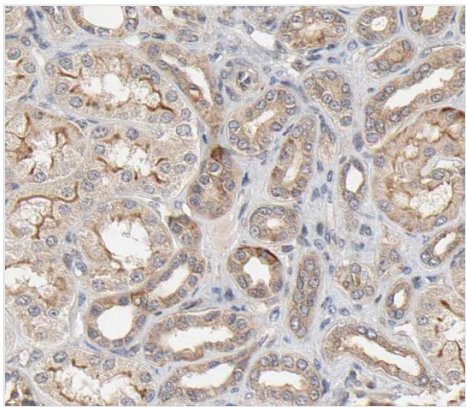
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PDGFRalpha antibody detects endogenous levels of total PDGFRalpha
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1089
Applicable Applications for anti-PDGFRα antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PDGFRalpha
Subcellular Location	Membrane.
Tissue Specificity	Detected in platelets (at protein level). Widely expressed. Detected in brain, fibroblasts, smooth muscle, heart, and embryo. Expressed in primary and metastatic colon tumors and in normal colon tissue.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



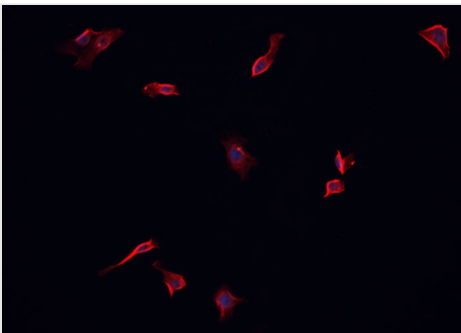
WB (Western Blot)

Western blot analysis on 293 cell lysate using PDGFRalpha Antibody, The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA320882 at 1/100 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IF (Immunofluorescence)

AAA320882 staining CACO-2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-PDGFRα antibody	Description: PDGFRα a receptor tyrosine kinase of the PDGFR family that binds members of the platelet-derived growth factor family. The identity of the growth factor bound determines whether the functional receptor is a homodimer or a heterodimer, composed of both PDGFR-α and -β. Ligand binding induces receptor dimerization and autophosphorylation. Function: Tyrosine-protein kinase that acts as a cell-surface receptor for PDGFA, PDGFB and PDGFC and plays an essential role in the regulation of embryonic development, cell proliferation, survival and chemotaxis. Depending on the context, promotes or inhibits cell proliferation and cell migration. Plays an important role in the differentiation of bone marrow-derived mesenchymal stem cells. Required for normal skeleton development and cephalic closure during embryonic development. Required for normal development of the mucosa lining the gastrointestinal tract, and for recruitment of mesenchymal cells and normal development of intestinal villi. Plays a role in cell migration and chemotaxis in wound healing. Plays a role in platelet activation, secretion of agonists from platelet granules, and in thrombin-induced platelet aggregation. Binding of its cognate ligands-homodimeric PDGFA, homodimeric PDGFB, heterodimers formed by PDGFA and PDGFB or homodimeric PDGFC-leads to the activation of several signaling cascades; the response depends on the nature of the bound ligand and is modulated by the formation of heterodimers between PDGFRα and PDGFRβ. Phosphorylates PIK3R1, PLCG1, and PTPN11. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1, 4, 5-trisphosphate, mobilization of cytosolic Ca²⁺ and the activation of protein kinase C. Phosphorylates PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and thereby mediates activation of the AKT1 signaling pathway. Mediates activation of HRAS and of the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3 and STAT5A and/or STAT5B. Receptor signaling is down-regulated by protein phosphatases that dephosphorylate the receptor and its down-stream effectors, and by rapid internalization of the activated receptor. Subunit Structure: Interacts with homodimeric PDGFA, PDGFB and PDGFC, and with heterodimers formed by PDGFA and PDGFB. Monomer in the absence of bound ligand. Interaction with dimeric PDGFA, PDGFB and/or PDGFC leads to receptor dimerization, where both PDGFRα homodimers and heterodimers with PDGFRβ are observed. Interacts (tyrosine phosphorylated) with SHB (via SH2 domain) (By similarity). Interacts (tyrosine phosphorylated) with SHF (via SH2 domain). Interacts (tyrosine phosphorylated) with SRC (via SH2 domain). Interacts (tyrosine phosphorylated) with PIK3R1. Interacts (tyrosine phosphorylated) with PLCG1 (via SH2 domain). Interacts (tyrosine phosphorylated) with CRK, GRB2 and GRB7. Interacts with human cytomegalovirus/HHV-5 envelop glycoprotein B/gB. Post-translational Modifications: N-glycosylated. Ubiquitinated, leading to its degradation. Autophosphorylated on tyrosine residues upon ligand binding. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit. Phosphorylation at Tyr-731 and Tyr-742 is important for interaction with PIK3R1. Phosphorylation at Tyr-720 and Tyr-754 is important for interaction with PTPN11. Phosphorylation at Tyr-762 is important for interaction with CRK. Phosphorylation at Tyr-572 and Tyr-574 is important for interaction with SRC and SRC family members. Phosphorylation at Tyr-988 and Tyr-1018 is important for interaction with PLCG1. Similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	1115538446
NCBI GeneID	5156
NCBI Accession #	NP_001334758.1
NCBI GenBank Nucleotide #	NM_001347829.1
UniProt Accession #	P16234; Q6P4H5; Q96KZ7; Q9UD28; B2RE69; E9PBH0
Molecular Weight	Observed: 140 kDa Predicted: 123 kDa
NCBI Official Full Name	platelet-derived growth factor receptor alpha isoform 1
NCBI Official Synonym Full Names	platelet derived growth factor receptor alpha
NCBI Official Symbol	PDGFRA
NCBI Official Synonym Symbols	CD140A; PDGFR2; PDGFR-2
NCBI Protein Information	platelet-derived growth factor receptor alpha

UniProt Protein Name	Platelet-derived growth factor receptor alpha
UniProt Gene Name	PDGFRA
UniProt Synonym Gene Names	PDGFR2; RHEPDGFRA; PDGF-R-alpha; PDGFR-alpha; PDGFR-2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pdgfralpha-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/320882>