

Rabbit PDGF Receptor alpha Polyclonal Antibody | anti-PDGFalpha antibody

Phospho-PDGF Receptor alpha (Tyr1018) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329769	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (92%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Chicken (92%), Xenopus (100%)	ELISA, Western Blot

PRODUCT SYNONYMS

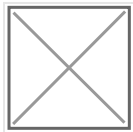
PDGF Receptor alpha; Polyclonal Antibody; Phospho-PDGF Receptor alpha (Tyr1018) Antibody; Alpha-type platelet-derived growth factor receptor; CD140 antigen-like family member A; CD140a; CD140a antigen; MGC74795; PDGF alpha chain; PDGF-R-alpha; PDGFR 2; PDGFR alpha; PDGFR2; PDGFRA; PDGFRA/BCR fusion; 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-PDGFalpha antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (92%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Chicken (92%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-PDGF Receptor alpha (Tyr1018) Antibody detects endogenous levels of PDGF Receptor alpha only when phosphorylated at Tyr1018. 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.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-PDGFalpha antibody	ELISA (Peptide ELISA), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PDGF Receptor alpha around the phosphorylation site of Tyr1018.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	N-glycosylated. Ubiquitinated, leading to its internalization and 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.

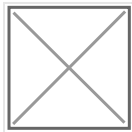
Subunit Structure	Interacts with homodimeric PDGFA, PDGFB and PDGFC, and with heterodimers formed by PDGFA and PDGFB. Monomer in the absence of bound ligand. Interaction with dimeric PDGFA, PDGFB and/or PDGFC leads to receptor dimerization, where both PDGFRA homodimers and heterodimers with PDGFRB are 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. (Microbial infection) Interacts with human cytomegalovirus/HHV-5 envelope glycoprotein B/gB. Interacts also with the trimeric complex gH-gL-gO.
Similarity	Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.
Subcellular Location	Cell membrane>Single-pass type I membrane protein. Cell projection>Cilium. Golgi apparatus.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of PDGFRA (Phospho-Tyr1018) using HepG2 whole cell lysates. -/+ means absence or presence of N peptide(¼ non-phospho peptide) and P peptide(phospho peptide).



WB (Western Blot)

Western blot analysis of extracts from 3T3-L1P6(heat shock treatment), using Phospho-PDGF Receptor alpha (Tyr1018) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PDGFalpha antibody	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 PDGFRA and PDGFRB. 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 Ca (2+) 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.
---	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	5453870
NCBI GeneID	5156
NCBI Accession #	NP_006197.1
NCBI GenBank Nucleotide #	NM_006206.4
UniProt Accession #	P16234; Q6P4H5; Q96KZ7; Q9UD28; B2RE69; E9PBH0
Molecular Weight	122,670 Da
NCBI Official Full Name	platelet-derived growth factor receptor alpha

NCBI Official Synonym Full Names	platelet-derived growth factor receptor, alpha polypeptide
NCBI Official Symbol	PDGFRA
NCBI Official Synonym Symbols	CD140A; PDGFR2; PDGFR-2; RHEPDGFRA
NCBI Protein Information	platelet-derived growth factor receptor alpha; PDGF-R-alpha; CD140a antigen; PDGFRA/BCR fusion; CD140 antigen-like family member A; platelet-derived growth factor receptor 2; alpha-type platelet-derived growth factor receptor; rearranged-in-hypereosinophi
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
UniProt Entry Name	PGFRA_HUMAN

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/pdgf-receptor-alpha-antibody-peptide-elisa-western-blot-elisa/329769>