

Rabbit PDGFRB Antibody | anti-PDGFRB antibody

PDGFRB Antibody

CATALOG # AAA266761	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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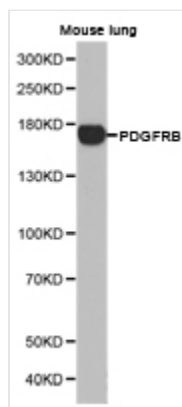
PRODUCT SYNONYMS

PDGFRB; PDGFRB Antibody; CD140B; JTK12; PDGF-R-beta; PDGFR; PDGFR1; anti-PDGFRB antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Isotype	IgG
Purity/Purification	Affinity purification
Form/Format	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Sequence Length	1106
Applicable Applications for anti-PDGFRB antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant protein of human PDGFRB
Preparation and Storage	Store at -20 degree C or -80 degree C. Avoid freeze/thaw cycles.

IMAGES



WB (Western Blot)

Western blot analysis of extracts of mouse lungcell lines, using PDGFRB antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-PDGFRB antibody	Platelet derived growth factor (PDGF) family proteins exist as several disulphide-bonded, dimeric isoforms (PDGF AA, PDGF AB, PDGF BB, PDGF CC, and PDGF DD) that bind in a specific pattern to two closely related receptor tyrosine kinases, PDGF receptor alpha (PDGFRalpha) and PDGF receptor beta (PDGFRbeta). PDGFRalpha and PDGFRbeta share 75% to 85% sequence homology between their two intracellular kinase domains, while the kinase insert and carboxy-terminal tail regions display a lower level (27% to 28%) of homology (1). PDGFRalpha homodimers bind all PDGF isoforms except those containing PDGF D. PDGFRbeta homodimers bind PDGF BB and DD isoforms, as well as the PDGF AB heterodimer. The heteromeric PDGF receptor alpha/beta binds PDGF B, C, and D homodimers, as well as the PDGF AB heterodimer (2). PDGFRalpha and PDGFRbeta can each form heterodimers with EGFR, which is also activated by PDGF (3). Various cells differ in the total number of receptors present and in the receptor subunit composition, which may account for responsive differences among cell types to PDGF binding (4). Ligand binding induces receptor dimerization and autophosphorylation, followed by binding and activation of cytoplasmic SH2 domain-containing signal transduction molecules, such as GRB2, Src, GAP, PI3 kinase, PLC gamma, and NCK. A number of different signaling pathways are initiated by activated PDGF receptors and lead to control of cell growth, actin reorganization, migration, and differentiation (5). Tyr751 in the kinase-insert region of PDGFRbeta is the docking site for PI3 kinase (6). Phosphorylated pentapeptides derived from Tyr751 of PDGFRbeta (pTyr751-Val-Pro-Met-Leu) inhibit the association of the carboxy-terminal SH2 domain of the p85 subunit of PI3 kinase with PDGFRbeta (7). Tyr740 is also required for PDGFRbeta-mediated PI3 kinase activation (8).
Product Categories/Family for anti-PDGFRB antibody	Autophagy antibody ; Cancer ; Cardiovascular ; Cell Biology ; Epigenetics & Nuclear Signaling ; Developmental Biologys ; Immunology ; Drug Discovery Products ; Metabolism ; Neuroscience ; Signal Transduction ; Stem Cells
References	1. Deuel, T.F. et al. (1988) Biofactors 1, 213-217. 2. Bergsten, E. et al. (2001) Nat. Cell Biol. 3, 512-516. 3. Betsholtz, C. et al. (2001) Bioessays 23, 494-507. 4. Coughlin, S.R. et al. (1988) Prog. Clin. Biol. Res. 266, 39-45. 5. Ostman, A. and Heldin, C.H. (2001) Adv. Cancer Res. 80, 1-38. 6. Panayotou, G. et al. (1992) EMBO J. 11, 4261-4272. 7. Ramalingam, K. et al. (1995) Bioorg. Med. Chem. 3, 1263-1272. 8. Kashishian, A. et al. (1992) EMBO J. 11, 1373-1382.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505683
NCBI GeneID	5159
NCBI Accession #	NP_002600.1
NCBI GenBank Nucleotide #	NM_002609.3
UniProt Accession #	P09619; Q8N5L4; B5A957
Molecular Weight	124kDa
NCBI Official Full Name	platelet-derived growth factor receptor beta isoform 1
NCBI Official Synonym Full Names	platelet derived growth factor receptor beta
NCBI Official Symbol	PDGFRB
NCBI Official Synonym Symbols	IMF1; KOGS; IBGC4; JTK12; PDGFR; PENTT; CD140B; PDGFR1; PDGFR-1
NCBI Protein Information	platelet-derived growth factor receptor beta
UniProt Protein Name	Platelet-derived growth factor receptor beta
UniProt Gene Name	PDGFRB
UniProt Synonym Gene Names	PDGFR; PDGFR1; PDGF-R-beta; PDGFR-beta; PDGFR-1

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.