

Datasheet for ABIN910520

**anti-PDGFRB antibody (AA 981-1066) (AbBy Fluor® 647)**[Go to Product page](#)**1** Publication

## Overview

|                      |                                                                                                                                |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Quantity:            | 100 µL                                                                                                                         |
| Target:              | PDGFRB                                                                                                                         |
| Binding Specificity: | AA 981-1066                                                                                                                    |
| Reactivity:          | Human, Mouse, Rat                                                                                                              |
| Host:                | Rabbit                                                                                                                         |
| Clonality:           | Polyclonal                                                                                                                     |
| Conjugate:           | This PDGFRB antibody is conjugated to AbBy Fluor® 647                                                                          |
| Application:         | Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)) |

## Product Details

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| Immunogen:            | KLH conjugated synthetic peptide derived from human PDGF-R-B |
| Isotype:              | IgG                                                          |
| Cross-Reactivity:     | Human, Mouse, Rat                                            |
| Predicted Reactivity: | Dog,Cow                                                      |
| Purification:         | Purified by Protein A.                                       |

## Target Details

|                   |                                                        |
|-------------------|--------------------------------------------------------|
| Target:           | PDGFRB                                                 |
| Alternative Name: | PDGF Receptor beta ( <a href="#">PDGFRB Products</a> ) |

## Target Details

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Background: | <p>Synonyms: IMF1, IBGC4, JTK12, PDGFR, CD140B, PDGFR1, PDGFR-1, Platelet-derived growth factor receptor beta, PDGF-R-beta, PDGFR-beta, Beta platelet-derived growth factor receptor, Beta-type platelet-derived growth factor receptor, CD140 antigen-like family member B, Platelet-derived growth factor receptor 1, PDGFRB</p> <p>Background: Tyrosine-protein kinase that acts as cell-surface receptor for homodimeric PDGFB and PDGFD and for heterodimers formed by PDGFA and PDGFB, and plays an essential role in the regulation of embryonic development, cell proliferation, survival, differentiation, chemotaxis and migration. Plays an essential role in blood vessel development by promoting proliferation, migration and recruitment of pericytes and smooth muscle cells to endothelial cells. Plays a role in the migration of vascular smooth muscle cells and the formation of neointima at vascular injury sites. Required for normal development of the cardiovascular system. Required for normal recruitment of pericytes (mesangial cells) in the kidney glomerulus, and for normal formation of a branched network of capillaries in kidney glomeruli. Promotes rearrangement of the actin cytoskeleton and the formation of membrane ruffles. Binding of its cognate ligands - homodimeric PDGFB, heterodimers formed by PDGFA and PDGFB or homodimeric PDGFD - 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 PLCG1, PIK3R1, PTPN11, RASA1/GAP, CBL, SHC1 and NCK1. 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. Phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leads to the activation of the AKT1 signaling pathway. Phosphorylation of SHC1, or of the C-terminus of PTPN11, creates a binding site for GRB2, resulting in the activation of HRAS, RAF1 and down-stream MAP kinases, including MAPK1/ERK2 and/or MAPK3/ERK1. Promotes phosphorylation and activation of SRC family kinases.</p> |
| Gene ID:    | 5159                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| UniProt:    | <a href="#">P09619</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Pathways:   | <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Inositol Metabolic Process</a> , <a href="#">Glycosaminoglycan Metabolic Process</a> , <a href="#">Smooth Muscle Cell Migration</a> , <a href="#">Platelet-derived growth Factor Receptor Signaling</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Application Details

|                    |                    |
|--------------------|--------------------|
| Application Notes: | IF(IHC-P) 1:50-200 |
|                    | IF(IHC-F) 1:50-200 |

## Application Details

---

IF(ICC) 1:50-200

Restrictions: For Research Use only

## Handling

---

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS ( pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Expiry Date: 12 months

## Publications

---

Product cited in: Quattrocelli, Giacomazzi, Broeckx, Ceelen, Bolca, Spaas, Sampaolesi: "Equine-Induced Pluripotent Stem Cells Retain Lineage Commitment Toward Myogenic and Chondrogenic Fates." in: **Stem cell reports**, Vol. 6, Issue 1, pp. 55-63, (2016) ([PubMed](#)).