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PDGFRA / PDGFR Alpha Antibody (C-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS12386

Specification

PDGFRA / PDGFR Alpha Antibody (C-Terminus) - Product Information

Application	**IHC**
Primary Accession	P16234
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**123kDa KDa**

PDGFRA / PDGFR Alpha Antibody (C-Terminus) - Additional Information

Gene ID 5156

Other Names
Platelet-derived growth factor receptor alpha, PDGF-R-alpha, PDGFR-alpha, 2.7.10.1, Alpha platelet-derived growth factor receptor, Alpha-type platelet-derived growth factor receptor, CD140 antigen-like family member A, CD140a antigen, Platelet-derived growth factor alpha receptor, Platelet-derived growth factor receptor 2, PDGFR-2, CD140a, PDGFRA, PDGFR2, RHEPDGFRA

Target/Specificity
Recognizes human PDGFR, alpha. Species cross-reactivity: Mouse.

Reconstitution & Storage
+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions
PDGFRA / PDGFR Alpha Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PDGFRA / PDGFR Alpha Antibody (C-Terminus) - Protein Information

Name PDGFRA

Synonyms PDGFR2, RHEPDGFRA

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 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.

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection, cilium {ECO:0000250|UniProtKB:P26618}. Golgi apparatus {ECO:0000250|UniProtKB:P26618}

Tissue Location
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.

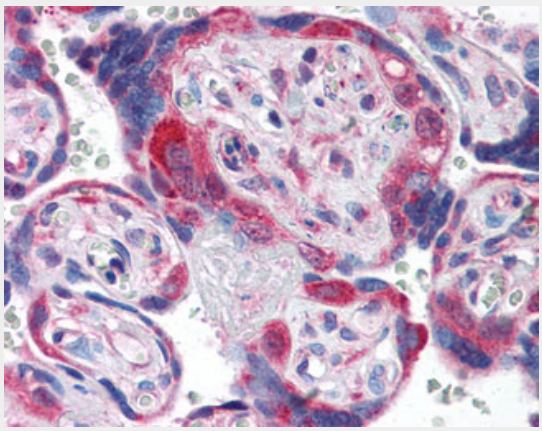
Volume
250 µl

PDGFRA / PDGFR Alpha Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PDGFRA / PDGFR Alpha Antibody (C-Terminus) - Images



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Anti-PDGFRA antibody IHC of human placenta.

PDGFRA / PDGFR Alpha Antibody (C-Terminus) - Background

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PDGFRA / PDGFR Alpha Antibody (C-Terminus) - References

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Matsui T.,et al.Science 243:800-804(1989).
Kawagishi J.,et al.Genomics 30:224-232(1995).
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