

Product name:	PDGF Receptor α (phospho-Tyr1018) Rabbit Polyclonal Antibody
Cat number:	ABN05225
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized phospho peptide around human PDGF Receptor α (Tyr1018)
Reactivity:	Human, Mouse
Applications:	WB 1:500-1:2000, IHC 1:50-1:300, ELISA 1:2000-1:20000
Molecular Weight:	180kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer or a heterodimer, composed of both platelet-derived growth factor receptor alpha and beta polypeptides. Studies suggest that this gene plays a role in organ development, wound healing, and tumor progression. Mutations in this gene have been associated with idiopathic hypereosinophilic syndrome, somatic and familial gastrointestinal stromal tumors, and a variety of other cancers. [provided by RefSeq, Mar 2012], catalytic activity: $\text{ATP} + \text{a [protein]-L-tyrosine} = \text{ADP} + \text{a [protein]-L-tyrosine phosphate}$., disease: A fusion of PDGFRA and FIP1L1 (FIP1L1-PDGFR), due to an interstitial chromosomal deletion, is the cause of some cases of hypereosinophilic syndrome (HES) [MIM:607685]. HES is a rare hematologic disorder characterized by sustained overproduction of eosinophils in the bone marrow, eosinophilia, tissue infiltration and organ damage., function: Receptor that binds both PDGFA and PDGFB and has a tyrosine-protein kinase activity., similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily., similarity: Contains 1 protein kinase domain., similarity: Contains 5 Ig-like C2-type (immunoglobulin-like) domains., subunit: Homodimer, and heterodimer with PDGFRB. Interacts with the SH2 domain of SHB via phosphorylated Tyr-720 (By similarity). Interacts with the SH2 domain of SHF via phosphorylated Tyr-720., tissue specificity: Expressed in primary and metastatic colon tumors and in normal colon tissue. Tumors may express a different isoform to that found in normal tissue.,