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|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | PDGFR- $\alpha$ (phospho Tyr849) Rabbit Polyclonal Antibody                                                                                          |
| <b>Cat number:</b>       | ABN05229                                                                                                                                             |
| <b>Conjugate:</b>        | Unconjugated                                                                                                                                         |
| <b>Size:</b>             | 100 $\mu$ L                                                                                                                                          |
| <b>Clone:</b>            | Polyclonal                                                                                                                                           |
| <b>Concentration:</b>    | 1mg/ml                                                                                                                                               |
| <b>Host:</b>             | Rabbit                                                                                                                                               |
| <b>Isotype:</b>          | IgG                                                                                                                                                  |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from human PDGFR $\alpha$ around the phosphorylation site of Tyr849. AA range:816-865 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                                                      |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000                                                                               |
| <b>Molecular Weight:</b> | 140kDa                                                                                                                                               |
| <b>Purification:</b>     | Affinity purification                                                                                                                                |
| <b>Form:</b>             | Liquid                                                                                                                                               |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                                                                   |
| <b>Storage:</b>          | 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: ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate., disease: A fusion of PDGFRA and FIP1L1 (FIP1L1-PDGFR $\alpha$ ), 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.,