

# Immunotag™ PDGFR-α Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                                                                                                  |
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| Catalog No.            | ITT3634                                                                                                                                                                                                                                          |
| Product Description    | Immunotag™ PDGFR-α Polyclonal Antibody                                                                                                                                                                                                           |
| Size                   | 50 µg, 100 µg                                                                                                                                                                                                                                    |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                                                                                                    |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.                                                                               |
| Target Protein         | PDGFR-α                                                                                                                                                                                                                                          |
| Clonality              | Polyclonal                                                                                                                                                                                                                                       |
| Storage/Stability      | -20°C/1 year                                                                                                                                                                                                                                     |
| Application            | WB,ELISA                                                                                                                                                                                                                                         |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.                                                                                                                                                               |
| Concentration          | 1 mg/ml                                                                                                                                                                                                                                          |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                                                                                                  |
| Host Species           | Rabbit                                                                                                                                                                                                                                           |
| Immunogen              | Synthesized peptide derived from PDGFR-α, at AA range: 960-1040                                                                                                                                                                                  |
| Specificity            | PDGFR-α Polyclonal Antibody detects endogenous levels of PDGFR-α protein.                                                                                                                                                                        |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                                                                                                             |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                          |
| Gene Name              | PDGFRA                                                                                                                                                                                                                                           |
| Accession No.          | P16234 P26618 P20786                                                                                                                                                                                                                             |
| Alternate Names        | PDGFRA; PDGFR2; RHEPDGFRA; Platelet-derived growth factor receptor alpha; PDGF-R-alpha; PDGFR-alpha; Alpha platelet-derived growth factor receptor; Alpha-type platelet-derived growth factor receptor; CD140 antigen-like family member A; CD14 |

## Antibody Specification

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| Description                 | platelet derived growth factor receptor alpha(PDGFRα) Homo sapiens 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],                                                                                                                                                                                                                                                                                                                                          |
| Cell Pathway/<br>Category   | MAPK_ERK_Growth,MAPK_G_Protein,Calcium,Cytokine-cytokine receptor interaction,Endocytosis,Focal adhesion,Gap junction,Regulates Actin and Cytoskeleton,Pathways in cancer,Colorectal cancer,Glioma,Prostate cancer,Melanoma,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Protein<br>Expression       | Blood,Brain,Colon tumor,Eosinophil,Foreskin,Lung,Placenta,T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Subcellular<br>Localization | nucleus,cytoplasm,plasma membrane,integral component of plasma membrane,membrane,intrinsic component of plasma membrane,protein complex,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Protein Function            | catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,disease:A fusion of PDGFRA and FIP1L1 (FIP1L1-PDGFRα), 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 PDGFα and PDGFβ 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 PDGFRβ. 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., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |