

Product datasheet for **AP20991PU-N**

PDGF Receptor beta (PDGFRB) Rabbit Polyclonal Antibody

Product data:

| | |
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| Product Type: | Primary Antibodies |
| Applications: | IHC, WB |
| Recommended Dilution: | Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections 1/50 - 1/200. |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Specificity: | This antibody detects endogenous levels of PDGFR beta protein. (region surrounding Asp757) |
| Formulation: | Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide |
| Concentration: | 1.0 mg/ml |
| Purification: | Affinity chromatography (> 95% (by SDS-PAGE) |
| Conjugation: | Unconjugated |
| Storage: | Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| Predicted Protein Size: | ~ 124, 190 kDa |
| Gene Name: | platelet derived growth factor receptor beta |
| Database Link: | Entrez Gene 18596 Mouse Entrez Gene 24629 Rat Entrez Gene 5159 Human P09619 |



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Background:

Platelet-derived growth factor (PDGF) is a mitogen for mesenchyme- and gliaderived cells. PDGF consists of two chains, A and B, which dimerize to form functionally distinct isoforms, PDGF-AA, PDGF-AB and PDGF-BB. These three isoforms bind with different affinities to two receptor types, PDGFR-alpha and -beta, which are endowed with protein tyrosine kinase domains. PDGFR-alpha can bind to both A and B subunits of PDGF, while PDGFR-beta can only bind the B subunit. Ligand binding promotes either homo- or heterodimerization of the PDGF receptors in a specific manner. PDGF-AA induces the dimerization of two alpha receptors, PDGF-AB induces dimerization of alpha-alpha and alpha-beta and PDGF-BB induces the formation of three types of dimers, alpha-alpha, alpha-beta and beta-beta. The genes encoding PDGFR-alpha and -beta map to human chromosome 4q11-q13 and 5q31-32, respectively. The expressed alpha and beta receptor proteins migrate at 170 and 180 kDa, respectively, by SDS-PAGE. Translocation of the PDGFR-beta gene with the Tel gene is linked to chronic myelomonocytic leukemia (CMML), a myelodysplastic syndrome, and demonstrates the oncogenic potential of the PDGF receptors.

Synonyms:

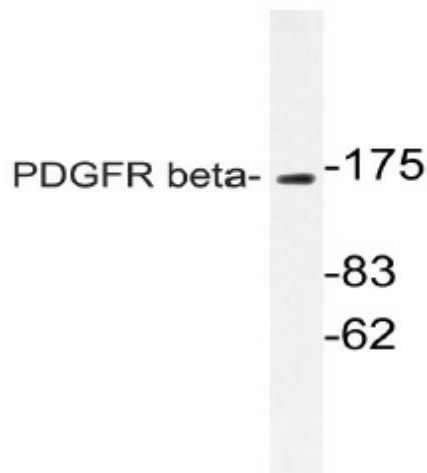
PDGF-R-beta, PDGF Receptor beta

Protein Families:

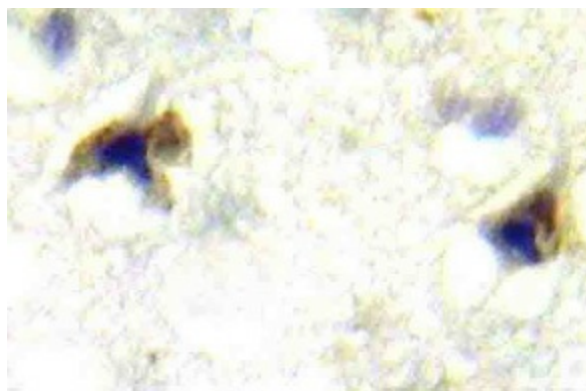
Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

Protein Pathways:

Calcium signaling pathway, Colorectal cancer, Cytokine-cytokine receptor interaction, Focal adhesion, Gap junction, Glioma, MAPK signaling pathway, Melanoma, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton

Product images:

Western blot (WB) analyzes of PDGFR beta antibody (Cat.-No.: AP20991PU-N) in extracts from NIH/3T3 cells.



Immunohistochemistry (IHC) analyzes of PDGFR beta antibody (Cat.-No.: AP20991PU-N) in paraffin-embedded human brain tissue.