Active Recombinant Full Length Human PDGFRB Protein, C-Flag-tagged

Cat. No. PDGFRB-544HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human PDGFRB Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	The protein encoded by this gene is 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 (PDGFB or PDGFD) or a heterodimer (PDGFA and PDGFB). This gene is essential for normal development of the cardiovascular system and aids in rearrangement of the actin cytoskeleton. This gene is flanked on chromosome 5 by the genes for granulocyte-macrophage colony-stimulating factor and macrophage-colony stimulating factor receptor; all three genes may be implicated in the 5-q syndrome. A translocation between chromosomes 5 and 12, that fuses this gene to that of the ETV6 gene, results in chronic myeloproliferative disorder with eosinophilia.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	PDGFRB activity verified in a biochemical assay: PDGFRB (platelet-derived growth factor receptor, beta polypeptide) activity was measured in a homogeneous time-

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	resolved fluorescent (HTRF®) assay. PDGFRB is a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. Varying concentrations of PDGFRB were added to a reaction mix containing ATP and a biotinylated kinase substrate and the reaction mixture was incubated to allow the protein to phosphorylate the tyrosine residue in the substrate. HTRF detection reagents were then added, and the time-resolved fluorescent signal was measured on a Flexstation 3 microplate reader. The time resolved fluorescent signal is expressed as “delta R” or “ΔR” and is a ratio calculated from the fluorescent emission intensities of the donor and acceptor fluors.
Molecular Mass	123.8 kDa
AA Sequence	MRLPGAMPALALKGELLLLSLLLLLEPQISQGLVVTPPGPELVLNVSSTFVLTCSGSA PVVWERMSQEPP QEMAKAQDGTFSSVLTLTNLTGLDTGEYFCTHNDSRGLETDER KRLYIFVPDPTVGFLPNDAEELFIFLT EITEITIPCRVTDPQLVVTLHEKKGDVALPVPY DHQRGFFGIFEDRSYICKTTIGDREVDSDAYYVYRLQ VSSINVSVNAVQTVVRQGEN ITLMCIVIGNEVVNFEWTYPRKESGRLVEPVTDFLLDMPYHIRSILHIPS AELEDSGTY TCNVTESVNDHQDEKAINITVVESGYVRLLGEVGTLQFAELHRSRTLQVVFEAYPPP TVLW FKDNRTLGDSSAGEIALSTRNVSETRYVSELTLVRVKVAEAGHYTMRAFHED AEVQLSFQLQINVPVRVL ELSESHPDSGEQTVRCRGRGMPQPNIIWSACRDLKRCP RELPPTLLGNSSEEESQLETNVTYWEEEQEFE VVSTLRLQHVDRPLSVRCTLRNAV GQDTQEVIVVPHSLPFKVVVISAILALVVLTIISLIILIMLWQKKP RYEIRWKVIESVSSD GHEYIYVDPMQLPYDSTWELPRDQLVLGRTLGSGAFGQVVEATAHGLSHSQATMK VAVKMLKSTARSSEKQALMSELKIMSHLGPHLNVVNLLGACTKGGPIYIITEYCRYGD LVDYLHRNKHTF LQHHSDKRRPPSAELYSNALPVGLPLPSHVSLTGESDGGYMDM SKDESVDYVPMLDMKGDVKYADIESSN YMAPYDNYVPSAPERTCRATLINESPVLS YMDLVGFSYQVANGMEFLASKNCVHRDLAARNVLICEGKLV KICDFGLARDIMRDS NYISKGSTFLPLKWMAPESIFNSLYTTLSDVWSFGILLWEIFTLGGTPYPELPMN EQF YNAIKRGYRMAQPAHASDEIYEIMQKCWEEKFEIRPPFSQLVLLLERLLGEGYKKKY QQVDEEFLRS DHPAILRSQARLPGFHGLRSPLDTSSVLYTAVQPNEGDNDYIIPLPD

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	PKPEVADEGPLEGSPSLASSTLN EVNTSSTISCDSPLEPQDEPEPEPQLELQVEPEPELEQLPDSGCPAPRAEAEDSFLT RTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
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
Full Length	Full L.

GENE INFORMATION

Gene Name	PDGFRB platelet derived growth factor receptor beta [Homo sapiens (human)]
Official Symbol	PDGFRB
Synonyms	IMF1; KOGS; IBGC4; JTK12; PDGFR; PENTT; CD140B; PDGFR1; PDGFR-1

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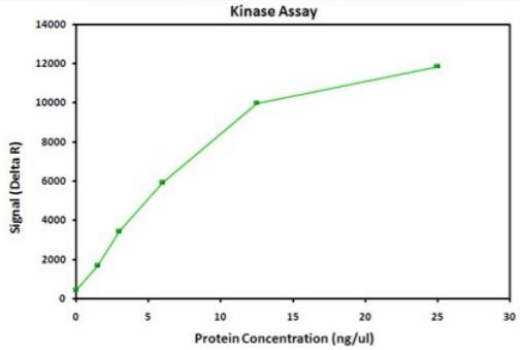
Gene ID	5159
mRNA Refseq	NM_002609.4
Protein Refseq	NP_002600.1
MIM	173410
UniProt ID	P09619
	

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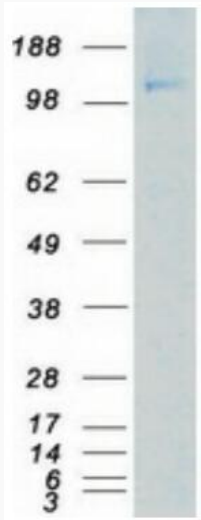

Coomassie blue staining of purified PDGFRB protein.

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