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Product datasheet for TP306377

PDGF Receptor beta (PDGFRB) (NM_002609) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human platelet-derived growth factor receptor, beta polypeptide (PDGFRB), 20 μg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC206377 representing NM_002609 Red=Cloning site Green=Tags(s)
	MRLPGAMPALALKGELLLLSLLLLEPQISQGLVVTPPGPELVLNVSSTFVLTCSGSAPVWERMSQEPP QEMAKAQDGTFSSVLTLTNLTGLDTGEYFCTHNDSRGLETDERKRLYIFVPDPTVGFLPNDAEELFIFLT EITEITIPCRVTDPQLVVTLHEKKGDVALPVPYDHQRGFFGIFEDRSYICKTTIGDREVDSDAYYVYRLQ VSSINVSVNAVQTVVRQGENITLMCIVIGNEVVNFEWTYPRKESGRLVEPVTDFLLDMPYHIRSILHIPS AELEDSGTYTCNVTESVNDHQDEKAINITVESGYVRLLGEVGTLQFAELHRSRTLQWFEAYPPPTVLW FKDNRTLGDSSAGEIALSTRNVSETRYVSELTLVRVKVAEAGHYTMRAFHEDAEVQLSFQLQINVPVRVL ELSESHPDSGEQTVRCRGRGMPQPNIIWSACRDLKRCPRELPPTLLGNSSEEESQLETNVTYWEEEQFFE VVSTLRLQHVDRPLSVRCTLRNAVGQDTQEVIVVPHSLPFKVVVISAILALVVLTIISLIILIMLWQKKP RYEIRWKVIESVSSDGHEYIVVDPMQLPYDSTWELPRDQLVLGRTLGSGAFGQVVEATAHGLSHSQATMK VAVKMLKSTARSSEKQALMSELKIMSHLGPHLNVVNLLGACTKGGPIYIITEYCRYGDLVDYLHRNKHTF LQHHSDKRRPPSAELYSNALPVGLPLPSHVSLTGESDGGYMDMSKDESVDYVPMLDMKGDVKYADIESS N YMAPYDNYVPSAPERTCRATLINESPVLSYMDLVGFSYQVANGMEFLASKNCVHRDLAARNVLICEGKLV KICDFGLARDIMRDSNYISKGSTFLPLKWMAPESIFNSLYTTLSDVWSFGILLWEIFTLGGTPYPELPMN EQFYNAIKRGYRMAQPAHASDEIYEIMQKCWEEKFEIRPPFSQLVLLLERLLGEGYKKKYQQVDEEFLRS DHPAILRSQARLPGFHGLRSPLDTSSVLYTAVQPNEGDNDYIIPLPDPKPEVADEGPLEGSPSLASSTLN EVNTSSTISCDSPLEPQDEPEPEQLELQVEPEPELEQLPDSGCPAPRAEAEDSFL
Tag:	C-Myc/DDK
Predicted MW:	123.8 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining



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	PDGF Receptor beta (PDGFRB) (NM_002609) Human Recombinant Protein – TP306377
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	PDGFRB activity verified in a biochemical assay: PDGFRB (platelet-derived growth factor receptor, beta polypeptide) (TP306377) activity was measured in a homogeneous time- 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 " Δ R" and is a ratio calculated from the fluorescent emission intensities of the donor and acceptor fluors.
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP 002600</u>
Locus ID:	5159
UniProt ID:	<u>P09619</u>
RefSeq Size:	5718
Cytogenetics:	5q32
RefSeq ORF:	3318
Synonyms:	CD140B; IBGC4; IMF1; JTK12; KOGS; PDGFR; PDGFR-1; PDGFR1; PENTT
Summary:	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. [provided by RefSeq, Aug 2017]
Protein Families	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

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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:



Coomassie blue staining of purified PDGFRB protein (Cat# TP306377). The protein was produced from HEK293T cells transfected with PDGFRB cDNA clone (Cat# [RC206377]) using MegaTran 2.0 (Cat# [TT210002]).

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