Recombinant Human PDGFRB protein, Fc-tagged

Cat. No. PDGFRB-184H **Lot. No.** (See product label)

SPECIFICATION

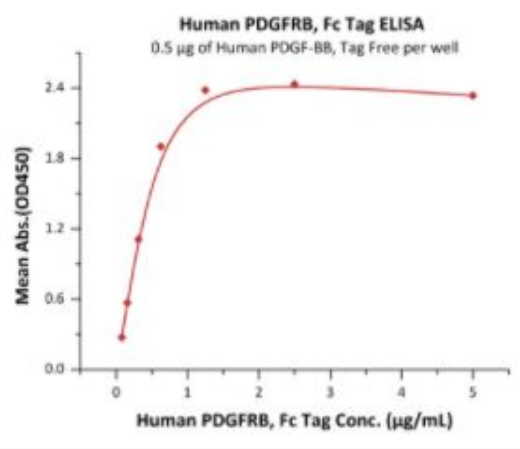
Product Overview	Recombinant Human PDGFRB (Leu33-Phe530) protein was fused to human IgG1 Fc tag at C-terminus and expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	Leu33-Phe530
Description	Human platelet-derived growth factor receptor, beta polypeptide (PDGFRB) is also called J03278, M21616, CD140B, JTK12, PDGF-R-beta and PDGFR, is receptor that binds specifically to PDGFB and has a tyrosine-protein kinase activity. Is a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor (PDGF) family. The PDGFR/PDGF system includes two receptors (PDGFRA and PDGFRB) and four ligands (A, B, C and D). The receptors PDGFRA and PDGFRB are related in sequence and both are members of the class III subtype of receptor tyrosine kinases (RTKs). Other class III RTKs are CSF1R, KIT and FLT3. PDGF binding induces receptor homo- and heterodimerization and signal transduction. The expression of the α and β receptors is independently regulated in various cell types. Recombinant soluble PDGFRB binds PDGF with high affinity and is potent PDGF antagonist. The ligands form either homo- or heterodimers (PDGF-AA, -AB, -BB, -CC, -DD). The four PDGFs are inactive in their monomeric forms. The PDGFs bind to the protein tyrosine kinase receptors PDGF receptor-α and -β. These two receptor isoforms dimerize upon binding the PDGF dimer, leading to three possible receptor

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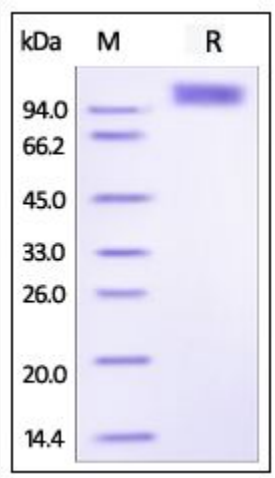
	combinations, namely -αα, -ββ and -αβ. PDGF-CC specifically interacts with PDGFR-αα and -αβ, but not with –ββ, and thereby resembles PDGF-AB. PDGF-DD binds to PDGFR-ββ with high affinity, and to PDGFR-αβ to a much lower extent and is regarded as PDGFR-ββ specific. PDGF-AA binds only to PDGFR-αα, while PDGF-BB is the only PDGF that can bind all three receptor combinations with high affinity.
Predicted N Terminal	Leu33
Form	Lyophilized from 0.22 μm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 82.8 kDa. The protein migrates as 120-140 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4℃ before opening to recover the entire contents.

GENE INFORMATION

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Gene Name	PDGFRB
Official Symbol	PDGFRB
Synonyms	PDGFRB; platelet-derived growth factor receptor, beta polypeptide; PDGFR; platelet-derived growth factor receptor beta; CD140b; JTK12; PDGFR1; PDGFR-beta; PDGF-R-beta; CD140 antigen-like family member B; platelet-derived growth factor receptor 1; beta-type platelet-derived growth factor receptor; CD140B; PDGFR-1
Gene ID	5159
mRNA Refseq	NM_002609
Protein Refseq	NP_002600
MIM	173410
UniProt ID	P09619
Bioactivity-ELISA of PDGFRB-184H	

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	Immobilized Human PDGF-BB, Tag Free at 5 μg/mL (100 μL/well) can bind Human PDGFRB, Fc Tag with a linear range of 0.078-0.625 μg/mL (QC tested).
SDS-PAGE of PDGFRB-184H	 Human PDGFRB, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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