Human CellExp™ PDGFRb/CD140b, human recombinant

CATALOG #: 7493-10 10 µg
7493-50 50 µg

ALTERNATE NAMES: PDGFRB, PDGFR-B, CD140B, CD-140B, JTK12, JTK-12, PDGF-R-beta, PDGFR, PDGFR1, PDGFR-1, PDGFR-beta, PDGFR-β, PDGF-R-β

SOURCE: HEK 293 cells (Leu 33 – Phe 530)

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: This protein contains C-terminal polyhistidine tag and has a calculated MW of 57.1 kDa. As a result of glycosylation, DTT-reduced protein migrates as 85-95 kDa polypeptide in SDS-PAGE.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

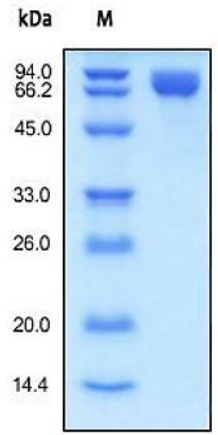
FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in 50 mM Tris, 100 mM glycine, pH 7.0. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: Human platelet-derived growth factor receptor, beta polypeptide (PDGFRB), 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 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 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.

BIOLOGICAL ACTIVITY: Measured by its ability to inhibit the biological activity of PDGFBB using NR6R-3T3 mouse fibroblast cells. The ED_{50} for this effect is typically 3-8 µg/ml in the presence of 4 ng/ml rhPDGFBB.



Human recombinant PDGFRb/CD140b

RELATED PRODUCTS:

- Human CellExp™ CD223, human recombinant **(Cat. No. 7278-10, -50)**
- Human CellExp™ CD71, human recombinant **(Cat. No. 7279-10, -50)**
- Human CellExp™ CD273, human recombinant **(Cat. No. 7369-10, -50)**
- Human CellExp™ CD33, human recombinant **(Cat. No. 7370-10, -50)**
- Human CellExp™ CD36, human recombinant **(Cat. No. 7371-10, -50)**
- Human CellExp™ CD87, human recombinant **(Cat. No. 7372-20, -100)**
- Human CellExp™ CD360, human recombinant **(Cat. No. 7373-20, -100)**
- Human CellExp™ CD244, human recombinant **(Cat. No. 7374-10, -50)**