# Recombinant Mouse PDGF-BB Protein

## Catalog No.: RP01745



## Sequence Information

**Species**
Mouse

**Gene ID**
18591

**Swiss Prot**
P31240

**Tags**
C-6His

**Synonyms**
Sis; c-sis; PDGF-2; PDGF-B; PDGFB

## Product Information

**Source**
HEK293 cells

**Purification**
≥ 95 % as determined by SDS-PAGE.

**Calculated MW**
13.06 kDa

**Observed MW**
15-25 kDa

**Endotoxin**
< 1 EU/μg of the protein by LAL method.

**Formulation**
Lyophilized from a 0.22 μm filtered solution of 20mMNaAc-Hac pH4.5

**Reconstitution**
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Background

PDGFs are mitogenic during early developmental stages, driving the proliferation of undifferentiated mesenchyme and some progenitor populations. During later maturation stages, PDGF signalling has been implicated in tissue remodelling and cellular differentiation, and in inductive events involved in patterning and morphogenesis. In addition to driving mesenchymal proliferation, PDGFs have been shown to direct the migration, differentiation and function of a variety of specialised mesenchymal and migratory cell types, both during development and in the adult animal. Other growth factors in this family include vascular endothelial growth factors B and C (VEGF-B, VEGF-C)which are active in angiogenesis and endothelial cell growth, and placenta growth factor (PlGF) which is also active in angiogenesis. PDGF plays a role in embryonic development, cell proliferation, cell migration, and angiogenesis. PDGF is a required element in cellular division for fibroblast, a type of connective tissue cell. PDGF is also known to maintain proliferation of oligodendrocyte progenitor cells. Platelet-derived growth factor subunit B is also known as PDGFB, FLJ12858, PDGF2, SIS, SSV, c-sis, is a member of the platelet-derived growth factor family. PDGFB can exist either as a homodimer (PDGF-BB) or as a heterodimer with the platelet-derived growth factor alpha polypeptide (PDGF-AB), where the dimers are connected by disulfide bonds. Mutations in this gene are associated with meningioma.

## Basic Information

**Description**
Recombinant Mouse PDGF-BB Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ser82-Thr190) of mouse PDGF subunit B/PDGF-2/PDGFB (Accession #NP_035187.2) fused with a 6×His tag at the C-terminus.

**Activity**
1.Measured by its binding ability in a functional ELISA.Immobilized Human PDGFB (Catalog: RP01745) at 2 μg/mL (100 μL/well) can bind Human PDGFRB (Catalog: RP00126) with a linear range of 12-153 ng/mL.2.Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED50 for this effect is 0.36-1.42 ng/mL, corresponding to a specific activity of 7.04 ×105~2.78×106 units/mg.

**Shipping**
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

**Storage**
Store at -20℃

**Operational Notes**
For your safety and health, please wear a lab coat and disposable gloves for handling.

**Contact**

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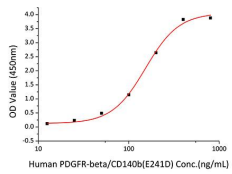
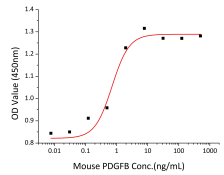
Please visit http://abclonal.com for a complete listing of recommended products.

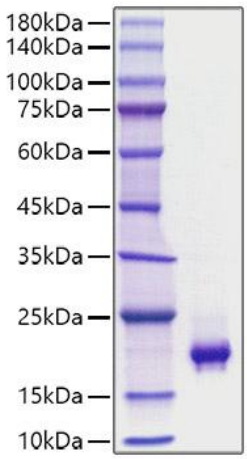
## Validation Data




Immobilized Human PDGFB (Catalog: RP01745) at 2 μg/mL (100 μL/well) can bind Human PDGFRB (Catalog: RP00126) with a linear range of 12-153 ng/mL.




Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The $ED_{50}$ for this effect is 0.36-1.42 ng/mL, corresponding to a specific activity of $7.04\times10^{5}$~$2.78\times10^{6}$ units/mg.




Recombinant Mouse PDGF-BB Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.