



## Synonym

PDGF-BB, PDGF-B, FLJ12858, PDGF2, SIS, SSV, c-sis

## Source

Unconjugated Human PDGF-BB, His,Avitag (PDB-H5127) is expressed from *E. coli* cells. It contains AA Ser 82 - Thr 190 (Accession # [P01127-1](#)).  
Predicted N-terminus: Met

## Molecular Characterization

PDGF-BB(Ser 82 - Thr 190)  
P01127-1

Poly-his

Avi

### [Other Tags and Version](#) [Biotin & Other Labeled Version](#)

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 15.1 kDa. The protein migrates as 17 kDa under reducing (R) condition, and 35 kDa under non-reducing (NR) condition (SDS-PAGE).

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22 µm filtered solution in 0.085% TFA in 30% ACN with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

**For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.**

## Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

**Please avoid repeated freeze-thaw cycles.**

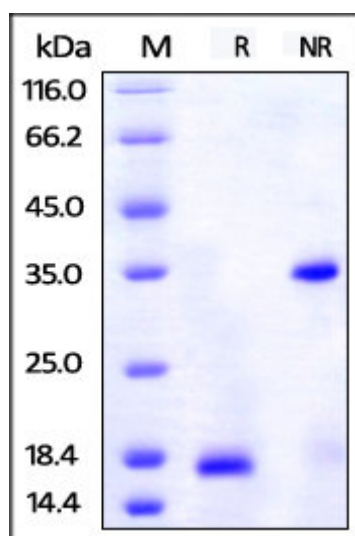
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## ACRO Quality Management System

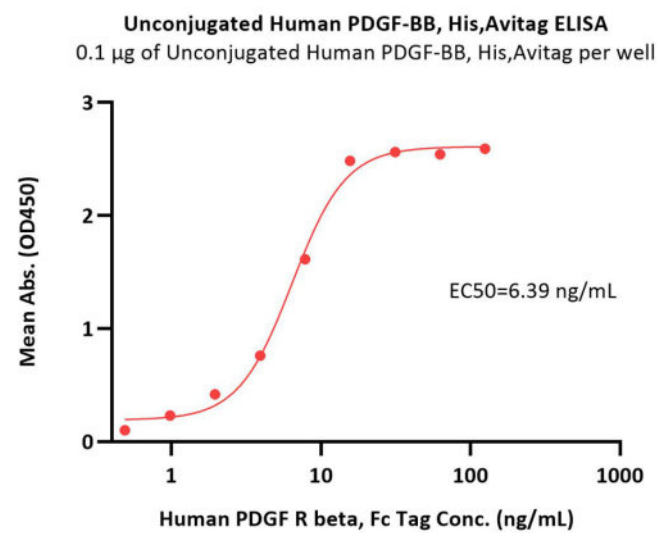
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

## SDS-PAGE



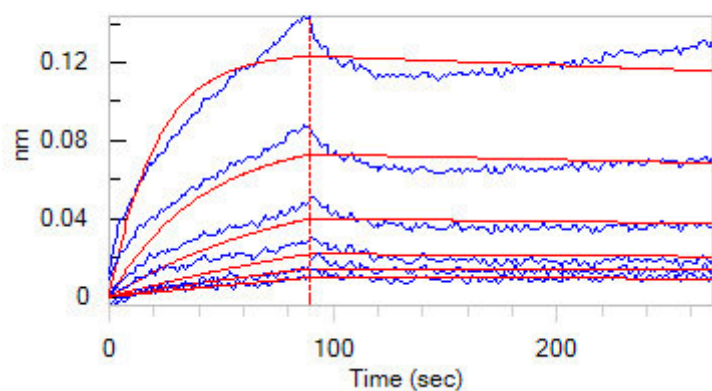
Unconjugated Human PDGF-BB, His,Avitag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity-ELISA

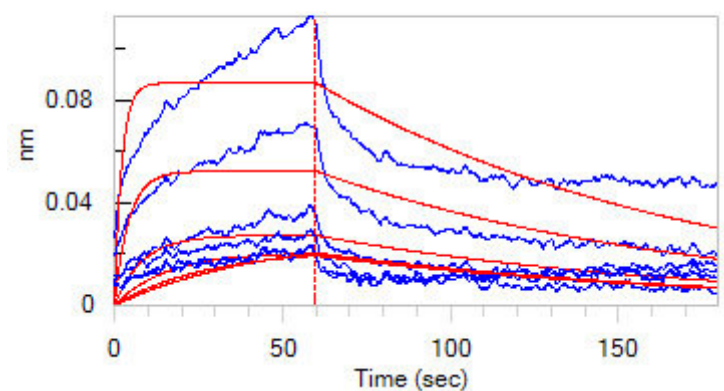


Immobilized Unconjugated Human PDGF-BB, His,Avitag (Cat. No. PDB-H5127) at 1 µg/mL (100 µL/well) can bind Human PDGF R beta, Fc Tag (Cat. No. PDB-H5259) with a linear range of 0.5-16 ng/mL (QC tested).

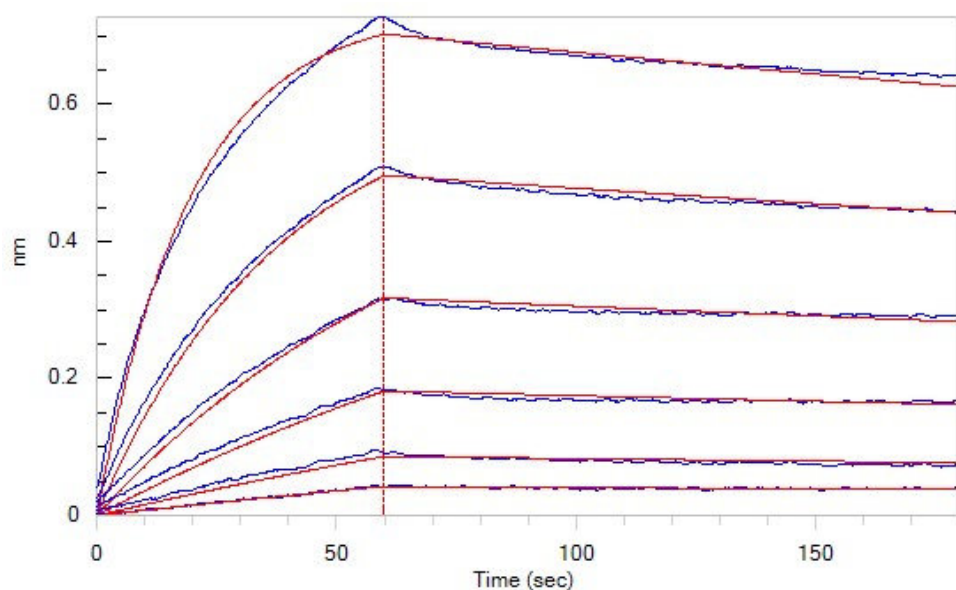
## Bioactivity-BLI



Loaded Unconjugated Human PDGF-BB, His,Avitag (Cat. No. PDB-H5127) on NTA Biosensor, can bind Human cluster II Protein, Fc Tag (Cat. No. LR1-H5254) with an affinity constant of 7.58 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Unconjugated Human PDGF-BB, His,Avitag (Cat. No. PDB-H5127) on NTA Biosensor, can bind Human cluster III Protein, Fc Tag (Cat. No. LR1-H5255) with an affinity constant of 20 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Unconjugated Human PDGF-BB, His,Avitag (Cat. No. PDB-H5127) on NTA Biosensor, can bind Human cluster IV Protein, Fc Tag (Cat. No. LR1-H5256) with an affinity constant of 4.82nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

## 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 (PIGF) 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.

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