Human PLGF / PGF (19-170) Protein, His Tag

Catalog # PGF-H5229

Synonym

PGF,PLGF,PlGF,PGFL,SHGC-10760

Source

Human PLGF (19-170) Protein, His Tag(PGF-H5229) is expressed from human 293 cells (HEK293). It contains AA Leu 19 - Arg 170 (Accession # NP_002623.2).
Predicted N-terminus: Leu 19

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 18.2 kDa. The protein migrates as 28-33 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 100 mM Acetic Acid, pH3.0 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

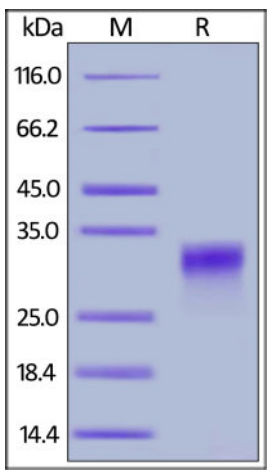
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

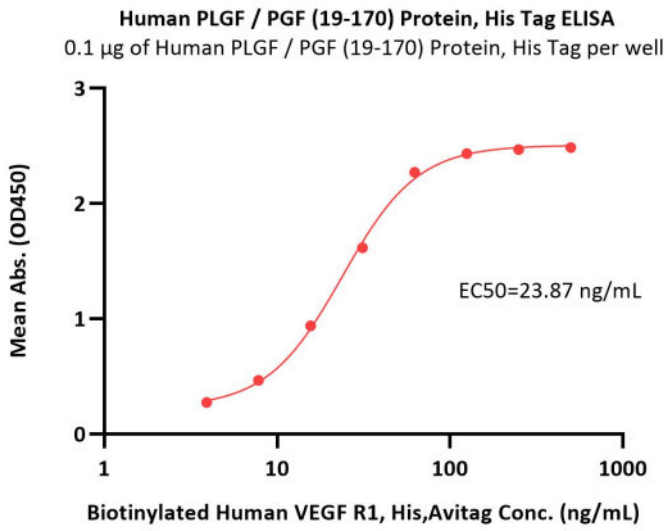
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human PLGF (19-170) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human PLGF (19-170) Protein, His Tag (Cat. No. PGF-H5229) at 1 μg/mL (100 μL/well) can bind Biotinylated Human VEGF R1, His,Avitag (Cat. No. VE1-H82E3) with a linear range of 4-63 ng/mL (QC tested).

Background

Placental growth factor (PGF) is also known as vascular endothelial growth factor-related protein, PLGF and PlGF2, is a member of the VEGF (vascular endothelial growth factor) sub-family - a key molecule in angiogenesis and vasculogenesis, in particular during embryogenesis. The main source of PGF during pregnancy is the placental trophoblast. PGF is also expressed in many other tissues, including the villous trophoblast. PGF is actived in angiogenesis and endothelial cell growth, stimulating their proliferation and migration. PlGF2 binds NRP1/neuropilin-1 and NRP2/neuropilin-2 in a heparin-dependent manner. Also promotes cell tumor growth.