



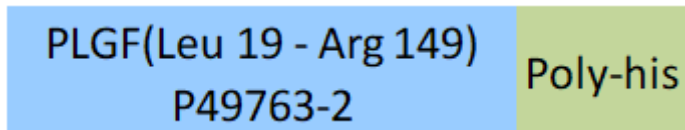
**Synonym**

PGF,PLGF,PIGF,PGFL,SHGC-10760

**Source**

Human PLGF (19-149) Protein, His Tag(PGF-H52H5) is expressed from human 293 cells (HEK293). It contains AA Leu 19 - Arg 149 (Accession # [P49763-2](#)).  
Predicted N-terminus: Leu 19

**Molecular Characterization**



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

The protein has a calculated MW of 16.6 kDa. The protein migrates as 20-30 kDa under reducing (R) condition, and 45-55 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

**Endotoxin**

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

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 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**

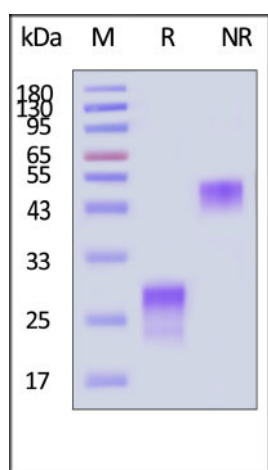
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

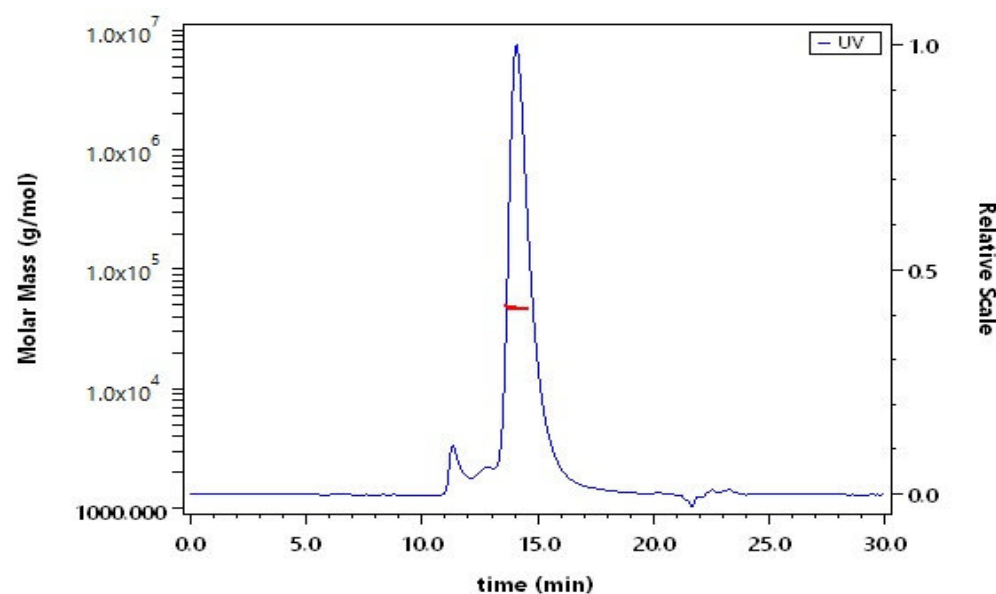
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



Human PLGF (19-149) Protein, His Tag 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 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

**SEC-MALS**



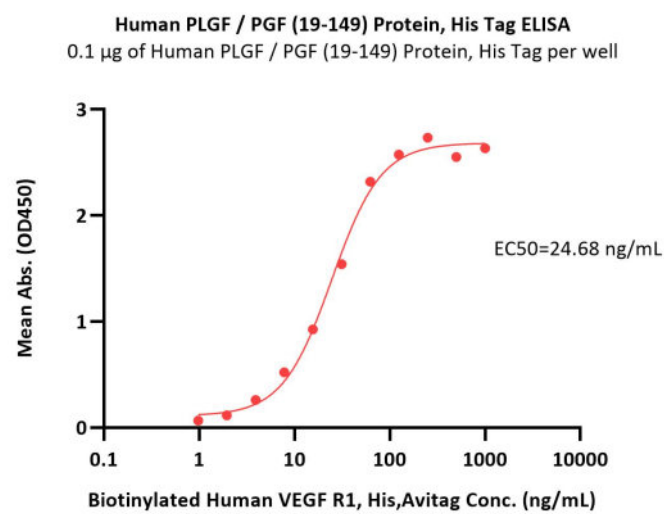
The purity of Human PLGF (19-149) Protein, His Tag (Cat. No. PGF-H52H5) is more than 85% and the molecular weight of this protein is around 42-52 kDa verified by SEC-MALS.

[Report](#)

**Bioactivity-ELISA**

Discounts, Gifts,  
and more!





Immobilized Human PLGF (19-149) Protein, His Tag (Cat. No. PGF-H52H5) at 1 µg/mL (100 µL/well) can bind Biotinylated Human VEGF R1, His, Avitag (Cat. No. VE1-H82E3) with a linear range of 1-31 ng/mL (QC tested).

## Background

Placental growth factor (PGF) is also known as vascular endothelial growth factor-related protein, PLGF and PIGF2, 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 activated in angiogenesis and endothelial cell growth, stimulating their proliferation and migration. PIGF2 binds NRP1/neuropilin-1 and NRP2/neuropilin-2 in a heparin-dependent manner. Also promotes cell tumor growth.

Discounts, Gifts,  
and more!

