

Synonym

PGF,PLGF,PIGF2,PIGF,PGFL,SHGC-10760

Source

Rhesus macaque PLGF, His Tag (PGF-R52H0) is expressed from human 293 cells (HEK293). It contains AA Leu 19 - Arg 170 (Accession # F7HB10-1).

Predicted N-terminus: Leu 19

Molecular Characterization

PLGF(Leu 19 - Arg 170)
F7HB10-1 Poly-his

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

The protein has a calculated MW of 19.3 kDa. The protein migrates as 28-34 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 100 mM Acetic Acid, pH2.5. Normally trehalose is added as protectant before lyophilization.

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.

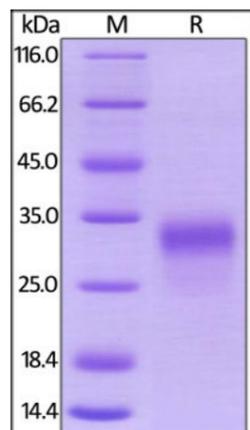
Storage

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:

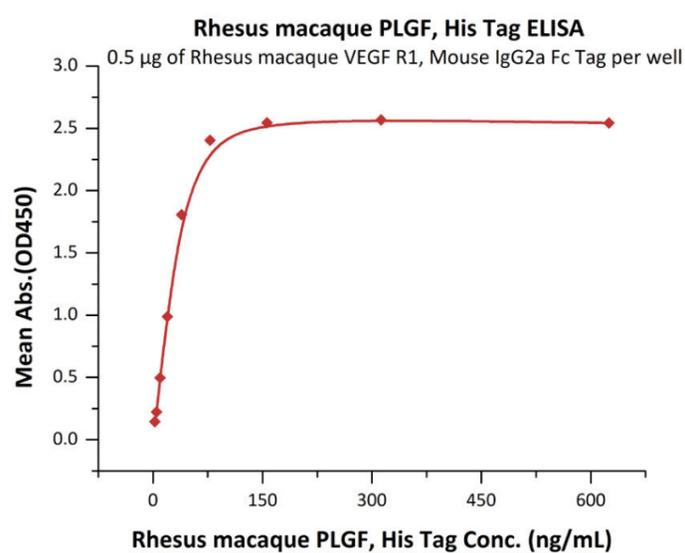
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Rhesus macaque PLGF, His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Rhesus macaque VEGF R1, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. [VE1-R5257](#)) at 5 µg/mL (100 µL/well) can bind Rhesus macaque PLGF, His Tag (Cat. No. [PGF-R52H0](#)) with a linear range of 2-40 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.

References

- (1) [Maglione D., et al., 1993, Oncogene 8 \(4\): 925-31.](#)
- (2) [Khalil A., et al., 2008, PLoS ONE 3 \(7\): e2766.](#)
- (3) [Khurana R., et al., 2005, Circulation 111 \(21\): 2828-2836.](#)
- (4) [Rolny C., et al., 2011, Cancer Cell 19:31-44.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.