

RP01080

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# Recombinant Mouse Placenta growth factor/PLGF/PGF Protein

Catalog No.: RP01080

Recombinant

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	18654	P49764

### Tags

C-hFc&His

### Synonyms

PGF;PLGF;PLGF2;PLGF;PGFL;SHGC-10760;PGF

## Product Information

Source	Purification
HEK293 cells	≥ 85 % as determined by SDS-PAGE.

### Endotoxin

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

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### 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 stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Background

Placenta growth factor (PLGF) is a member of the PDGF/VEGF family of growth factors that share a conserved pattern of eight cysteines. Alternative splicing results in at least three human mature PLGF forms containing 131 (PLGF-1), 152 (PLGF-2), and 203 (PLGF-3) amino acids (aa) respectively. Only PLGF-2 contains a highly basic heparin-binding 21 aa insert at the C-terminus. Human PLGF-1 shares 56%, 55%, 74% and 95% aa identity with the comparable isoform of mouse, rat, canine, and equine PLGF, respectively. PLGF is mainly found as variably glycosylated, secreted, 55-60 kDa disulfide linked homodimers. Mammalian cells expressing PLGF include villous trophoblasts, decidual cells, erythroblasts, keratinocytes, and some endothelial cells. Circulating PLGF increases during pregnancy, reaching a peak in mid-gestation; this increase is attenuated in preeclampsia. However, deletion of PLGF in the mouse does not affect development or reproduction. Postnatally, mice lacking PLGF show impaired angiogenesis in response to ischemia.

## Basic Information

### Description

Recombinant Mouse Placenta growth factor/PLGF/PGF Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Pro158) of mouse PLGF/PGF (Accession #NP\_032853.1) fused with an Fc, 6×His tag at the C-terminus.

### Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human VEGFR1 at 500 ng/mL (100 μL/well) can bind Recombinant Mouse PLGF with a linear range of 12-49 ng/mL.

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

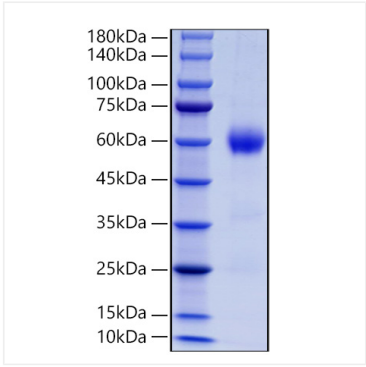
## Contact



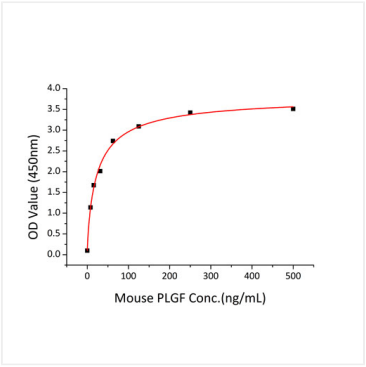
[www.abclonal.com](http://www.abclonal.com)

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

# Validation Data



Recombinant Mouse Placenta growth factor/PIGF/PGF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Recombinant Human VEGFR1 at 500ng/mL (100  $\mu$ L/well) can bind Recombinant Mouse PLGF with a linear range of 12-49 ng/mL.