

Recombinant Mouse Placenta growth factor/PIGF/PGF Protein

Catalog No.: RP01080 **Recombinant**

Sequence Information

Species **Gene ID** **Swiss Prot**
 Mouse 18654 P49764

Tags

C-hFc&His

Synonyms

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

Background

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

Product Information

Source **Purification**
 HEK293 cells $\geq 85\%$ as
 determined by SDS-PAGE.

Calculated MW **Observed MW**
 44.66 kDa 60 kDa

Endotoxin
 < 1 EU/ μ g of the protein by LAL method.

Formulation
 Lyophilized from a 0.22 μ m 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.

Basic Information

Description

Recombinant Mouse Placenta growth factor/PIGF/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 \times 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 μ L/well) can bind Recombinant Mouse PLGF with a linear range of 12-49 ng/mL.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

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.

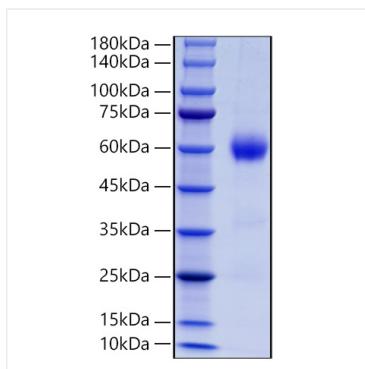
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

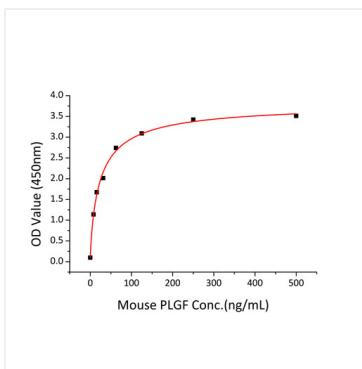
Contact

	400-999-6126
	cn.market@abclonal.com.cn
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Validation Data



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



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