

For Research Use Only

# Recombinant Mouse PLGF/PGF protein (His Tag)



Catalog Number: Eg0672

## Basic Information

**Species:**  
Mouse

**Purity:**  
>90 %, SDS-PAGE

**Tag:**  
His Tag

## Technical Specifications

**Purity:**

>90 %, SDS-PAGE

**Endotoxin Level:**

<0.1 EU/μg protein, LAL method

**Source:**

HEK293-derived Mouse PLGF protein Ala27-Pro158 (Accession# Q544A5) with a His tag at the C-terminus.

**GeneID:**

18654

**Accession:**

Q544A5

**Predicted Molecular Mass:**

16.2 kDa

**SDS-PAGE:**

20-30 kDa, reducing (R) conditions

**Formulation:**

Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Not tested

## Storage and Shipping

**Storage:**

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

**Shipping:**

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

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

PLGF (placenta growth factor), also named as PGF, is an angiogenic factor which belongs to vascular endothelial growth factor (VEGF) family. The human PLGF gene is located on chromosome 14q14 and encodes 4 isoforms of PLGF. The protein is secreted as a glycosylated homodimer and PLGF-1 and -3 are diffusible isoforms whereas PLGF-2 and PLGF-4 have heparin binding domains. PLGF was originally identified in the placenta, where it regulates growth and differentiation of trophoblasts. It is also expressed in umbilical vein endothelial cells and other non-placental tissues, like the thyroid gland and developing lung tissue. PLGF has angiogenic properties, enhancing survival, growth and migration of endothelial cells in vitro, and promotes vessel formation in certain in-vivo models. Serum levels of PLGF and sFlt-1 (also known as soluble VEGF receptor-1) are altered in women with preeclampsia. PLGF is a potential biomarker for preeclampsia, a condition in which blood vessels in the placenta are too narrow, resulting in high blood pressure.

## References

1. Khalil A. et al. (2008) PLoS One. 23;3(7):e2766.
2. Dewerchin M. et al. (2012) Cold Spring Harb Perspect Med. 1;2(8).
3. Oura H. et al. (2003) Blood. 101(2):560-7.
4. Duhig KE. et al. (2019) Lancet. 393(10183):1807-1818.

## Synonyms

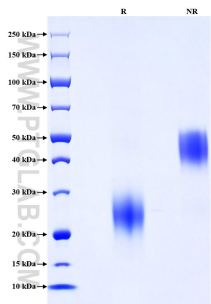
Pgf

For technical support and original validation data for this product please contact

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Selected Validation Data



Purity of Recombinant Mouse PLGF was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.