

# Placenta Growth Factor-1, human recombinant (rHuPLGF-1)

Catalog No: 87406
Lot No: XXXXX
Source: Insect cells

**Synonyms:** PIGF, PGF, PLGF-1, PIGF-2

## **Background**

PLGF is a growth factor active in angiogenesis, and endothelial cell growth, stimulating their proliferation and migration. It binds to receptor vegfr-1/flt1.

## Description

Placenta Growth Factor-1 human recombinant produced in insect cells is a homodimer, glycosylated polypeptide chain containing 2 x 131 amino acids and having a total molecular mass of approximately 34 kDa. PLGF-1 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

Lyophilized from a concentrated (1 mg/ml) solution containing 50 mM acetic acid.

### Solubility

It is recommended to reconstitute the lyophilized Placenta Growth Factor 1 in sterile 0.1 M acetic acid or PBS not less than  $100 \mu g/ml$ , which can then be further diluted to other aqueous solutions.

## Stability

Lyophilized Placenta Growth Factor 1, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PLGF1 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

## **Amino Acid Sequence**

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Pro-Ala-Val.

## Activity

The ED50 as determined by its ability to bind to immobilized rh-sFlt-1 in a functional ELISA. PIGF-1 human recombinant can bind to immobilized rh-sFlt-1 (100 ng/well) with a linear range at 0.5 - 10 ng/ml, corresponding to a specific activity of  $1 \times 10^5 - 2 \times 10^6$  units/mg.

# Usage

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