



Recombinant Human Placental Growth Hormone (rhPLGH)

Catalog #105-24

Product Description

Placenta growth factor (PLGH) is a glycosylated homodimeric protein primarily expressed in the placenta, with lower levels found in the heart, lung, thyroid, skeletal muscle, and adipose tissue. In the placenta, PLGH acts in an autocrine manner on trophoblasts, which express both PLGH and its receptor VEGFR-1, influencing trophoblast growth, differentiation, and invasion. PLGH can form heterodimers with VEGF-A when co-expressed, activating VEGFR-1 and VEGFR-1/VEGFR-2 heterodimers. This growth factor play crucial roles in angiogenesis, lymphangiogenesis, and endothelial cell growth, contributing to placental development and function throughout gestation.

Specifications

Synonyms:	PGH, PIGH, PIGF
AA Sequence:	LPAVPPQQW ALSAGNGSSE VEVVPFQEVW GRSYCRALER LVDVVSEYPS EVEHMFSPSC VLLRCTGCC GDENLHCVPV ETANVTMQLL KIRSGDRPSY VELTFSQHVR CECRPLREKM KPERCGDAVP RR
Source:	<i>Pichia pastoris</i>
Purity	> 95%

Quality Control

Endotoxin:	<0.1 ng/μg of protein (<1 EU/μg)
Sterility	No microorganisms
Physical Appearance:	Light yellow to white powder

Formulation

Lyophilized from a 0.2μm filtered concentrated (1mg/ml) solution in 1x PBS with dextran as protectant.

Reconstitution

Reconstitute in sterile distilled water or 1x PBS containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

Rev. 1

Shipping and Storage

Gel pack. Upon receipt, store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage

rhPLGH is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.