



# Recombinant Human PlGF-3

20200108BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-370S</b>
Size:	5 µg
Lot. No.:	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	5281
<b>Synonyms:</b>	PlGF; placental growth factor

PlGF-3 is an angiogenic factor that belongs to the cysteine-knot superfamily of growth factors. PlGF-3 is expressed exclusively in the placenta. It signals through the VEGFR-1/FLT1 receptor and stimulates endothelial cell proliferation and migration. PlGF-3 lacks heparin binding affinity. Recombinant human PlGF-3 is a 45.7 kDa disulfide-linked homodimeric protein of two 203 amino acid polypeptide chains.

### Sequence

LPVAVPPQQWA LSAGNGSSEV EVVVFQEVWG RSYCRALERL  
VDVVSEYPSE VEHMFSPSCV SLLRCTGCCG DENLHCVPVE  
TANVTMQLLK IRSGDRPSYV ELTFSQHVRC ECRHSPGRQS  
PDMPGDFRAD APSFLPPRRS LPLMFRMEWG CALTGSQSAV  
WPSSPVPEEI PRMHPGRNGK KQQRKPLREK MKPERCGDAV PRR

### Database References

<b>Protein RefSeq:</b>	NP_001193941.1
<b>Uniprot ID:</b>	P49763
<b>mRNA RefSeq:</b>	NM_001207012.1

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 95% by SDS-PAGE & HPLC analyses
<b>Structural Information</b>	disulphide-linked homodimer
<b>Endotoxin level</b>	< 0.1 ng/µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	203
<b>MW:</b>	45,7 kDa

**Stability:** The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

**Reconstitution:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** Determined by its ability to chemoattract human monocytes using a concentration range of 5-50 ng/ml.