

Recombinant Human PLGF Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50800

Size: 10ug, 100ug

Protein Name: Placenta growth factor (PIGF)

Synonym: PGF, PGFL, PLGF

UniProt ID: P49763

UniProt Link: www.uniprot.org/uniprotkb/P49763/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 221 AA

Molecular Weight: 25 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPVMRLFPCFLQLLAGLALPAVPPQQWALSAGNGSSEVEVVPFQEVWGRSYCRALERLVDVVSEY
PSEVEHMFSPSCVSLRLCTGCCGDENLHCVPVETANVTMQLLKIRSGDRPSYVELTFSQHVRCECR
HSPGRQSPDMPGDFRADAPSFLPPRRSLPMLFRMEWGCAITGSQSAVWPSSPVPEEIPRMHPGR
NGKKQQRKPLREKMKPERCGDAVPRR

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Placenta growth factor (PlGF) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Growth factor active in angiogenesis and endothelial cell growth, stimulating their proliferation and migration. It binds to the receptor FLT1/VEGFR-1. Isoform PlGF-2 binds NRP1/neuropilin-1 and NRP2/neuropilin-2 in a heparin-dependent manner. Also promotes cell tumor growth.

Subcellular Localization: Secreted. Note=The three isoforms are secreted but PlGF-2 appears to remain cell attached unless released by heparin.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.