

# Recombinant Human GDF10 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP50362

Size: 10ug, 100ug

Protein Name: Growth/differentiation factor 10 (GDF-10) (Bone morphogenetic protein 3B) (BMP-3B) (Bone-inducing protein) (BIP)

Synonym: GDF10, BMP3B

UniProt ID: P55107

UniProt Link: [www.uniprot.org/uniprotkb/P55107/entry](http://www.uniprot.org/uniprotkb/P55107/entry)

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 478 AA

Molecular Weight: 53 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MAHVPARTSPGPGPQLLLLLLPLFLLLLRDVAGSHRAPAWSALPAAADGLQGDRDLQRHPGDAAAT  
LGPSAQDMVAVHMHRLYEKYSRQGARPGGGNTVRSFRARLEVVDQKAVYFFNLTSMQDSEMILTA  
TFHFYSEPPRWPRALEVLCKPRAKNASGRPLPLGPPTQRHLLFRSLSQNTATQGLLRGAMALAPPP  
RGLWQAKDISPIVKAARRDGELLLSAQLDSEERDPGVPRPSPYAPYILVYANDLAISEPNSVAVTLQR  
YDPFPAGDPEPRAAPNNSADPRVRRAAQATGPLQDNELPGLDERPPRAHAQHFKHQLWPSPFRA  
LKPRPGRKDRRKKGQEVFMAASQVLDFDEKTMQKARRKQWDEPRVCSRRYLKVDFA DIGWNEWII  
SPKSFDAYYCAGACEFPMPKIVRPSNHATIQSIVRAVGIIPIPEPCCVPDKMNSLGVFLDENRNVVL  
KVYPNMSVDTACAR

## 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 Growth/differentiation factor 10 (GDF-10) (Bone morphogenetic protein 3B) (BMP-3B) (Bone-inducing protein) (BIP) 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 involved in osteogenesis and adipogenesis. Plays an inhibitory role in the process of osteoblast differentiation via SMAD2/3 pathway. Plays an inhibitory role in the process of adipogenesis.

**Subcellular Localization:** Secreted .

## 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.