

Recombinant Rat GDF10 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52399

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: P55108

UniProt Link: www.uniprot.org/uniprotkb/P55108/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 476 AA

Molecular Weight: 53 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAPGLARISLRSQLLPLVPLLLLLRGAGCGHRVPSWSSLPSAADSVQRDRDLQQSPGDAAAALGPG
AQDIVAVHMLRLYEKYNRRGAPPGGGNTVRSFRARLDVIDQKPVYFFNLTSMQDSEMILTATFHFYS
EPPRWPRAREVFCKPRAKNASCRLTPGLPARLHLIFRSLSQNTATQGLLRGAMALTPPPRGLWQA
KDISSIIKAARRDGELLLSAQLDSGEKDLGVPRPSSHMPYILVYANDLAISEPNSVAVTLQRYDPFPAG
DFEPGAAPNSSADPRVRRAAQVSKPLQDNELPGLDERPAPALHAQHFKHEFWSSPFRALKPRTG
RKDRKKKDQDTFTPSSSQVLDFDEKTMQKARRRQWDEPRVCSRRYLKVDFA DIGWNEWIISPKSFD
AAYCAGACEFPMPKIVRPSNHATIQSIVRAVGIVPGIPEPCCVDPKMNSLGVFLDENRNVVLKVYPN
MSVETCACR

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.