

Recombinant Human GDF11 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50363

Size: 10ug, 100ug

Protein Name: Growth/differentiation factor 11 (GDF-11) (Bone morphogenetic protein 11) (BMP-11)

Synonym: GDF11, BMP11

UniProt ID: O95390

UniProt Link: www.uniprot.org/uniprotkb/O95390/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 407 AA

Molecular Weight: 45 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVLAAPLLLGFLLLALELRPRGEEAEGPAAAAAAAAAAAAAGVGGERSSRPAPSVAPPEPDGCPVCV
WRQHSRELRLRESIKSQILSKLRLKEAPNISREVVKQLLPKAPPLQQILDHDFQGDALQPEDFLEED
YHATTETVISMAQETDPAVQTDGSPLCCHFHFSPKVMFTKVLKAQLWVYLRPVPRPATVYLQILRLK
PLTGEGTAGGGGGGRRHIRIRSLKIELHSRSGHWQSIDFKQVLHSWFRQPQSNWGEINAFDPSGT
DLAVTSLGPGAEGLHPFMELRVLENTKRSRRNLGLDCDEHSSESRCRYPLTVDFEAFGWDWIIAP
KRYKANYCSGQCEYMFQMYPHTHLVQQANPRGSAGPCCTPTKMSPINMLYFNDKQQIYGKIPGM
VVDRCGCS

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 11 (GDF-11) (Bone morphogenetic protein 11) (BMP-11) 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: Secreted signal that acts globally to regulate anterior/posterior axial patterning during development. May play critical roles in patterning both mesodermal and neural tissues (By similarity). It is required for proper vertebral patterning and orofacial development (PubMed:31215115). Signals through activin receptors type-2, ACVR2A and ACVR2B, and activin receptors type-1, ACVR1B, ACVR1C and TGFBR1 leading to the phosphorylation of SMAD2 and SMAD3 (PubMed:28257634).

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.