

Recombinant Rat GDF11 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52616

Size: 10ug, 100ug

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

Synonym: Gdf11, Bmp11

UniProt ID: Q9Z217

UniProt Link: www.uniprot.org/uniprotkb/Q9Z217/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 405 AA

Molecular Weight: 45 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVLAAPLLLGFLLLALELRPRGEEAEGPAAAAAAAAAAGVGGERSRRPAPSAAPEPDGCPVCVWR
QHSRELRLSEIKSQILSKLRLKEAPNISREVVKQLLPKAPPLQQILDLHDFQGDALQPEDFLEEDEYHA
TTETVISMAQETDPAVQTDGSPLCCHFHFSFKVMFTKVLKAQLWVYLRPVPRPATVYLQILRLKPLT
GEGTAGGGGGGRRHIRIRSLKIELHSRSGHWQSIDFKQVLHWSFRQPQSNWGIEINAFDPSGTDLA
VTSLGPGAEGLHPFMELRVLENTKRSRRNLGLDCDEHSSESRCRYPLTVDFEAFGWDWIIAPKRY
KANYCSGQCEYMFQMYPHTHLVQQANPRGSAGPCCTPTKMSPINMLYFNDKQQIYGKIPGMVVD
RCGCS

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. It is required for proper vertebral patterning and orofacial development. 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.

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.