

Recombinant Mouse GDF3 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51571

Size: 10ug, 100ug

Protein Name: Growth/differentiation factor 3 (GDF-3) (VG-1-related protein 2)

Synonym: Gdf3, Gdf-3, Vgr-2

UniProt ID: Q07104

UniProt Link: www.uniprot.org/uniprotkb/Q07104/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 366 AA

Molecular Weight: 42 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MQPYQRLLALGFLLLTLPWGQTSEFQDSDLLQFLGLEKAPSPHRFQPVPRVLRKIIRAREAAAASGA
SQDLCYVKELGVRGNLLQLLPDQGFFLNTQKPFQDGSCLQKVLNFNLSAIKEKAKLTMAQLTDLGP
RSYYNLRPELVVALSVVQDRGVWGRSHPKVGRLLFLRSVPGPQGQLQFNLQGALKDWSSNRLKNL
DLHLEILVKEDRYSRVTVQPENPCDRLRLSLHASLLVVTLPKHCHPSSRKRRAAISVPKGFCRNFC
HRHQLFINFQDLGWHKWVIAPKGFMANYPCHGECPFSSMTTYLNSSNYAFMQALMHMADPKVPAVC
VPTKLSPISMLYQDSDKNVILRHYEDMVVDECGCG

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 3 (GDF-3) (VG-1-related protein 2) 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 early embryonic development and adipose-tissue homeostasis. During embryogenesis controls formation of anterior visceral endoderm and mesoderm and the establishment of anterior-posterior identity through a receptor complex comprising the receptor ACVR1B and the coreceptor CRIPTO (PubMed:16368929, PubMed:17936261). Regulates adipose-tissue homeostasis and energy balance under nutrient overload in part by signaling through the receptor complex based on ACVR1C and CRIPTO.

Subcellular Localization: Secreted . Cytoplasm . Note=Mainly accumulated in the cytoplasm.

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.