

Recombinant Human GDF9 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50371

Size: 10ug, 100ug

Protein Name: Growth/differentiation factor 9 (GDF-9)

Synonym: GDF9

UniProt ID: O60383

UniProt Link: www.uniprot.org/uniprotkb/O60383/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 454 AA

Molecular Weight: 51 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MARPNKFLLWFCCFAWLCPISLGSQASGGEAQIAASAELESGAMPWSLLQHIDERDRAGLLPALFK
VLSVGRGGSPRLQPDSRALHYMKKLYKTYATKEGIPKSNRSHLYNTVRLFTPCTRHKQAPGDQVTGI
LPSVELLFNLDRIITVEHLLKSVLLYNINNSVSFSSAVKVCVNLMIKEPKSSSRTLGRAPYSFTFNSQF
EFGKKHKWIQIDVTSLLQPLVASNKRSIHMSINFTCMKDQLEHPSAQNGLFNMTLVSPSLILYLNDTS
AQAYHSWYSLHYKRRPSQGPQERSLSAYPVGEEAAEDGRSSHRRHRRGQETVSSELKKPLGPA
SFNLSEYFRQFLLPQNECELHDFRLSFSQLKWDNWIVAPHRYNPRYCKGDCPRAVGHRYGSPVHT
MVQNIIEKLDSSVPRPSCVPAKYSPLSVLTIEPDGSIAYKEYEDMIATKCTCR

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 9 (GDF-9) 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: Required for ovarian folliculogenesis. Promotes primordial follicle development. Stimulates granulosa cell proliferation. Promotes cell transition from G0/G1 to S and G2/M phases, through an increase of CCND1 and CCNE1 expression, and RB1 phosphorylation. It regulates STAR expression and cAMP-dependent progesterone release in granulosa and thecal cells. Attenuates the suppressive effects of activin A on STAR expression and progesterone production by increasing the expression of inhibin B. It suppresses FST and FSTL3 production in granulosa-lutein cells.

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.