

Recombinant Rat GDNF Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52457

Size: 10ug, 100ug

Protein Name: Glial cell line-derived neurotrophic factor (Astrocyte-derived trophic factor) (ATF)

Synonym: Gdnf

UniProt ID: Q07731

UniProt Link: www.uniprot.org/uniprotkb/Q07731/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 211 AA

Molecular Weight: 24 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MKLWDVVAVCLVLLHTASAFPLPAGKRLLEAPAEDHSLGHRRVPFALTSDSNMPEDYPDQFDDVMD
FIQATIKRLKRSPDKQAAALPRRERNRQAAAASPENSRGKGRRGQRGKNRGCVLTAIHLNVTDLGL
GYETKEELIFRYCSGSCEAAETMYDKILKNLSRSRRLTSDKVGQACCRPVAFDDDL SFLDDSLVYHIL
RKHS AKRCGCI

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 Glial cell line-derived neurotrophic factor (Astrocyte-derived trophic factor) (ATF) 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: Neurotrophic factor that enhances survival and morphological differentiation of dopaminergic neurons and increases their high-affinity dopamine uptake (PubMed:10828539). Acts by binding to its coreceptor, GFRA1, leading to autophosphorylation and activation of the RET receptor (By similarity). May also modulate local neuronal effects in distal regions of the motor neuron (PubMed:10828539). Involved in the development of the neural crest (By similarity).

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.