

## Human GDNF protein, His tag (Animal-Free)

Cat #: PRP1067 Size: 5 µg/20 µg/100 µg/1 mg

## **Product Information**

|     | Product Name: Human GDNF protein, His tag (Animal-Free)  |     |                                    |
|-----|--|-----|------------------------------------|
| REF | Catalog Number: PRP1067                                  | LOT | Lot Number: Refer to product label |
|     | Purity: > 95% as determined by SDS-PAGE                  |     |                                    |
| Ĵ/  | Storage: Store at -20°C                                  |     | Preparation method: E.coli         |
|     | Shipping: The product is shipped at ambient temperature. |     |                                    |

**Background:** Glial cell line-derived neurotrophic factor (GDNF) is a glycosylated, disulfide-bonded homodimer that is a distantly related member of the transforming growth factor-β superfamily. It is a founding member of the GDNF family of ligands (GFL) and has been shown to interact with GFRA2 and GDNF family receptor alpha. Mature Rat and Human GDNF exhibit approximately 93% amino acid sequence identity and show considerable species cross-reactivity. Cells known to express GDNF include Sertoli cells, type 1 astrocytes, Schwann cells, neurons, pinealocytes and skeletal muscle cells. In embryonic midbrain cultures, recombinant Human GDNF promoted the survival and morphological differentiation of dopaminergic neurons and increased their high-affinity dopamine uptake.

Sequence: Amino acid sequence derived from Human GDNF protein (Ser78-Ile211) with 6×His tag at the C-terminus was expressed.

**Protein length:** The recombinant Human GDNF consists of 134 amino acids and predicts a molecular mass of 16 kDa.

Biological Activity: Measure by its ability to induce proliferation in SH-SY5Y cells. The ED<sub>50</sub> for this effect is <10 ng/mL.

**<u>Endotoxin</u>**: < 0.1 EU per  $\mu$ g of the protein as determined by the LAL method.

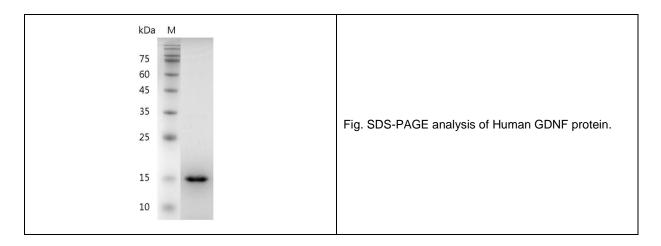
Formulation: The protein was lyophilized from 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.

<u>Storage Instructions</u>: Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (5% HSA, 10%FBS or 0.1%BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant Human



GDNF protein to a concentration of 0.1-1 mg/mL in sterile ddH<sub>2</sub>O, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.



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