

# Active Recombinant Human GDNF Protein

**Cat. No.** GDNF-279G    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human GDNF Protein without tag was expressed in CHO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>           | CHO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>      | <p>Glial cell line-derived neurotrophic factor (G-DNF) is a neurotrophic factors belong to TGF-beta super family necessary for neuron survival and phenotypic maintenance in central and peripheral nervous systems. G-DNF has the potent to support the differentiation and survival of many neuron subpopulations, prominent for dopaminergic neurons and motor neurons, as well as Purkinje cells and sympathetic neurons. Sertoli cells, type 1 astrocytes, Schwann cells, neurons, pinealocytes and skeletal muscle cells are known to express GDNF in human. GDNF has shown to interact with GFRA2 and GDNF family receptor alpha 1. Mutations in this gene may be associated with Hirschsprung's disease, Parkinson's disease and amyotrophic lateral sclerosis (ALS).</p> |
| <b>Form</b>             | Sterile Filtered White lyophilized (freeze-dried) powder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Bio-activity</b>     | ED50< 1 µg/mL, measured in a cell proliferation assay using rat C6 cells, corresponding to a specific activity of >1 × 10 <sup>3</sup> units/mg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Molecular Mass</b>   | 30.4 kDa (homo-dimer), observed by non-reducing SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>AA Sequence</b>      | RGQRGKNRGCVLTAIHLNVTDLGLGYETKEELIFRYCSGSCDAAETTYDKILKNLSR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | NRRLVSDKVGQACCRPIAFDDDLNFLVYHILRKHSKRCGCI                                                                                                                                                                                                                               |
| <b>Endotoxin</b>      | < 0.2 EU/μg, determined by LAL method.                                                                                                                                                                                                                                  |
| <b>Purity</b>         | > 95% as analyzed by SDS-PAGE and HPLC.                                                                                                                                                                                                                                 |
| <b>Storage</b>        | Lyophilized recombinant human Glial cell line-derived neurotrophic factor (G-DNF) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rhG-DNF should be stable up to 1 week at 4 centigrade or up to 2 months at -20 centigrade. |
| <b>Storage Buffer</b> | Lyophilized after extensive dialysis against PBS.                                                                                                                                                                                                                       |
| <b>Reconstitution</b> | Reconstituted in ddH <sub>2</sub> O or PBS at 100 μg/mL.                                                                                                                                                                                                                |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | GDNF glial cell derived neurotrophic factor [ Homo sapiens ]                                                                                                                                                                                                                                 |
| <b>Official Symbol</b> | GDNF                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>        | GDNF; glial cell derived neurotrophic factor; glial cell line-derived neurotrophic factor; astrocyte derived trophic factor; ATF1; ATF2; glial cell line derived neurotrophic factor; glial derived neurotrophic factor; HFB1 GDNF; ATF; astrocyte-derived trophic factor; HSCR3; HFB1-GDNF; |
| <b>Gene ID</b>         | 2668                                                                                                                                                                                                                                                                                         |
| <b>mRNA Refseq</b>     | NM_000514                                                                                                                                                                                                                                                                                    |
| <b>Protein Refseq</b>  | NP_000505                                                                                                                                                                                                                                                                                    |

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