

RP00835

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# Recombinant Human Mature GDNF Protein

Catalog No.: RP00835 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
<i>E. coli</i>	2668	P39905

### Tags

NO-Tag

### Synonyms

GDNF; Glial cell line-derived neurotrophic factor; hGDNF; Astrocyte-derived trophic factor; ATF

## Product Information

Source	Purification
<i>E. coli</i>	≥ 95 % as determined by SDS-PAGE.

### Endotoxin

< 0.01 EU/μg of the protein by LAL method

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Background

Glial cell line-derived neurotrophic factor(GDNF) is an important member of the GDNF family of ligands(GFL). The GDNF family of ligands is comprised by four neurotrophic factors: glial cell line-derived neurotrophic factor (GDNF), neurturin (NRTN), artemin (ARTN), and persephin (PSPN). It has been found that GFLs play a role in a number of biological processes including cell survival, neurite outgrowth, cell differentiation and cell migration. As the founding member, GDNF plays a key role in the promotion of the survival of dopaminergic neurons. GDNF is a highly conserved neurotrophic factor. The recombinant form of this protein also promotes the survival and differentiation of dopaminergic neurons in culture, and was able to prevent apoptosis of motor neurons induced by axotomy. GDNF also regulates kidney development and spermatogenesis, and it affects alcohol consumption. It has been shown that GDNF results in two Parkinson's disease clinical trial and in a number of animal trials. It has been taken as a po

## Basic Information

### Description

Recombinant Human GDNF Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Ser78-Ile211) of human GDNF (Accession #P39905).

### Bio-Activity

Measured in a cell proliferation assay using SH-SY5Y cells. The ED<sub>50</sub> for this effect is 1.82-7.26 ng/mL in the presence of Recombinant Human GFR alpha 1 (Catalog # RP01970), corresponding to a specific activity of 1.38×10<sup>5</sup> ~5.49×10<sup>5</sup> units/mg.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

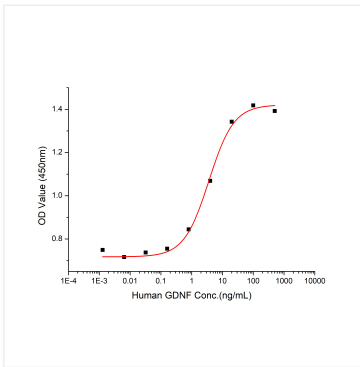
### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

## Validation Data

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Measured in a cell proliferation assay using SH-SY5Y cells. The ED<sub>50</sub> for this effect is 1.82-7.26 ng/mL in the presence of Recombinant Human GFR alpha  $\square$  1 (Catalog # RP01970), corresponding to a specific activity of  $1.38 \times 10^5 \sim 5.49 \times 10^5$  units/mg.