

**Animal-Free Recombinant Human GDNF**  
**Catalog # PBG10565****Specification**

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**Animal-Free Recombinant Human GDNF - Product Information****Animal-Free Recombinant Human GDNF - Additional Information****Description**

GDNF is a disulfide-linked homodimeric neurotrophic factor structurally related to Artemin, Neurturin and Persephin. These proteins belong to the cysteine-knot superfamily of growth factors that assume stable dimeric protein structures. GDNF signals through a multicomponent receptor system, composed of a RET and one of the four GFR $\alpha$  ( $\alpha$ 1- $\alpha$ 4) receptors. GDNF specifically promotes dopamine uptake and survival and morphological differentiation of midbrain neurons. Using Parkinson's disease M model, GDNF has been shown to improve conditions such as bradykinesia, rigidity, and postural instability. The functional human GDNF ligand is a disulfide-linked homodimer, of two 15 kDa polypeptide chains called monomers. Each monomer contains seven conserved cysteine residues, one of which (Cys 101) is used for inter-chain disulfide bridging and the others are involved in intramolecular ring formation known as the cysteine knot configuration.

**Biological Activity**

The  $ED_{50}$  was determined by the proliferation of rat C6 cells is  $< 0.1$  ng/ml, corresponding to a specific activity of  $> 1 \times 10^7$  units/mg.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $< 0.1$  ng/  $\mu$ g of protein ( $< 1$  EU/  $\mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Animal-Free Recombinant Human GDNF is for research use only and not for use in diagnostic or therapeutic procedures.

**Animal-Free Recombinant Human GDNF - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Animal-Free Recombinant Human GDNF - Images**