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

## Specification

## 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 GFRα (α1-α4) 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.

### BiologicalActivity
The ED<sub>50</sub> was determined by the proliferation of rat C6 cells is < 0.1 ng/ml, corresponding to a specific activity of > 1 x 10<sup>7</sup> units/mg.

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

### Endotoxin
Endotoxin level is <0.1 ng/ µg of protein (<1EU/ µg).

### 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 Cytomety
- Cell Culture

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