

**Recombinant Rat GDNF**  
**Catalog # PBG10140****Specification**

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**Recombinant Rat GDNF - Product Information****Recombinant Rat 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 rat 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**

Determined by its ability to stimulate the proliferation of rat C6 cells.

**Authenticity**

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

**Endotoxin**

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

**Protein Content**

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

**Storage**

-20°C

**Precautions**

Recombinant Rat GDNF is for research use only and not for use in diagnostic or therapeutic procedures.

**Recombinant Rat 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](#)

## **Recombinant Rat GDNF - Images**