

Recombinant Rat GDNF

Catalog # PBG10140

Specification

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.

BiologicalActivity

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 $<0.1 \text{ ng}/\mu\text{g}$ of protein ($<1\text{EU}/\mu\text{g}$).

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





- <u>Immunoprecipitation</u>
- Flow Cytomety
 Cell Culture

Recombinant Rat GDNF - Images