

Recombinant Murine GDNF

Catalog # PBG10139

Specification

Recombinant Murine GDNF - Product Information

Recombinant Murine 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 murine GDNF ligand is a disulfide-linked homodimer, of two 15.1 kDa polypeptide chains called monomers. Each monomer contains seven conserved cysteine residues, one of which is used for inter-chain disulfide bridging and the others are involved in intramolecular ring formation known as the cysteine knot configuration.

BiologicalActivity

The ED₅₀ was determined by the proliferation of rat C6 cells is \le 0.2 ng/ml, corresponding to a specific activity of \ge 5 x 10⁶ units/mg.

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

Recombinant Murine GDNF - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot





• <u>Immunohistochemistry</u>

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

Recombinant Murine GDNF - Images