

BACKGROUND:

Glial Cell Line-Derived Neurotrophic Factor, or GDNF, is a neurotrophic factor that is closely related to other neurotrophic factors such as Neurturin, Persephin, and Artemin, by a common structural feature called the cysteine-knot. GDNF signals through a multicomponent system of receptors that includes receptors known as RET, and GFR α 1-4 to promote dopamine uptake, survival and differentiation of neurons.

Recombinant human GDNF is a non-glycosylated homodimer, containing two 135 amino acid proteins and has a total molecular mass of 30.4 kDa.

Cat. No.:
RP1002AF

Alternate Names:
ATF-1

AA Sequence:

MSPDKQMAVL	PRRERNRQAA	AANPENSRGK
GRRGQRGKNR	GCVLTAIHLN	VTDLGLGYET
KEELIFRYCS	GSCDAAETTY	DKILKNSLRN
RRLVSDKVGQ	ACCRPIAFDD	DLSFLDDNLV
YHILRKHSAK	RCGCI	

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
10 mM sodium citrate, 100 mM sodium chloride, pH 4.0

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is measured by dose-dependent C6 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 3 ug/mL.

Animal Component-Free

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

