



Recombinant Human GDNF
(Glial Derived Neurotrophic Factor)

Catalog Number: 100-02

Accession Number: P39905

Specifications and Uses:

Alternate Names: ATF-1

Description:

Glial Cell Line-Derived Neurotrophic Factor (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 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 chains, with a total molecular weight of 30.4 kDa.

Source: *E.coli*

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

Formulation and Stability:

Recombinant human GDNF is lyophilized from 10 mM sodium citrate and 100 mM NaCl, pH 4.0. 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 a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity (typically \geq 98%) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:

Measured by kinetic LAL analysis and is typically \leq 1 EU/ μ g protein.

Biological Activity:

The activity is determined by the dose-dependent proliferation of C6 cells and is typically 0.5-5 μ g/mL.

AA Sequence:

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

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium