



Recombinant Human Glial cell line-Derived Neurotrophic Factor (rhGDNF)

Catalog #107-14

Product Description

Glial cell line-derived neurotrophic factor (GDNF) is a neurotrophic factor and a distant member of the TGF-beta super family. It is necessary for neuron survival and phenotypic maintenance in the central and peripheral nervous systems. GDNF can support the differentiation and survival of many neuron subpopulations, especially dopaminergic neurons and motor neurons, as well as sympathetic neurons and Purkinje cells. GDNF has been shown to interact with GFRA2 and GDNF family receptor alpha 1, triggering downstream signaling pathways to promote the development, survival, and maintenance of neuron-neuron and neuron-target tissue interactions. Mutations in this gene may be associated with Hirschsprung's disease, Parkinson's disease, and amyotrophic lateral sclerosis (ALS).

Specifications

Synonyms:	Glial-Derived Neurotrophic Factor; ATF-1; ATF2; HFB1-GDNF
AA Sequence:	MGSSHHHHHSSGLVPRGSHMSPDKQMAVLPRRER NRQAAAANPENSRGKGRRGQRGKNRGCVLTAIHLN VTDLGLGYETKEELIFRYCSGSCDAAETTYDKILKNL SRNRRLVSDKVGQACCRPIAFDDDLFLDDNLVYHI LRKHSKRRCGI
Source:	<i>E. coli</i>
Molecular Weight:	17.3 kDa

Quality Control

Purity	> 95%
Physical Appearance:	White lyophilized powder.
Endotoxin:	<0.1 ng/μg of protein (<1 EU/μg)

Formulation

Lyophilized from a 0.2μm filtered concentrated solution in 1x PBS with dextran as protectant.

Reconstitution

Reconstitute in sterile distilled water or 1x PBS containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

Rev. 0

Shipping and Storage

Gel pack. Upon receipt, store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage

rhGDNF is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.