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Product Datasheet

Product Name	Recombinant Human Glial-Derived Neurotrophic Factor
Cata No	CB500207
Source	Escherichia Coli.
Synonyms	ATF1, ATF2, HFB1-GDNF, GDNF

Description

GDNF promotes the survival and differentiation of dopaminergic neurons in culture, and is able to prevent apoptosis of motor neurons induced by axotomy. The encoded protein is processed to a mature secreted form that exists as a homodimer. The mature form of the protein is a ligand for the product of the RET (rearranged during transfection) protooncogene. In addition to the transcript encoding GDNF, two additional alternative transcripts encoding distinct proteins, referred to as astrocyte-derived trophic factors, have also been described. Mutations in this gene may be associated with Hirschsprung disease.
GDNF enhances survival and morphological differentiation of dopaminergic neurons and increases their high-affinity dopamine uptake.
Glial derived Neurotrophic Factor Human Recombinant produced in E.Coli is a homodimer, non-glycosylated, polypeptide chain containing 2 x 135 amino acids and having a total molecular mass of 30,360 Dalton.

Purity

Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Specific Activity

The ED50, calculated by the dose-dependant dopamin uptake in rat mesencephalic cultures was found to be 5-10 ng/ml.

Storage

Lyophilized Glial-derived Neurotrophic Factor although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution GDNF should be stored at 4℃ between 2-7 days and for future use below -18℃. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

Formulation

GDNF was lyophilized after dialysis against 10mM sodium citrate and 150mM NaCl.