

32-1237: GDNF Recombinant Protein

Alternative Name : ATF1,ATF2,HFB1-GDNF,GDNF.

Description

Source : Escherichia Coli. 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. GDNF is purified by proprietary chromatographic techniques. 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.

Product Info

Amount :	10 µg
Purification :	Greater than 98.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	GDNF was lyophilized after dialysis against 10mM sodium citrate and 150mM NaCl.
Storage condition :	Lyophilized Glial-derived Neurotrophic Factor although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GDNF should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid :	MSPDKQMAVL PRRERNRQAA AANPENSRGK GRRGQRGKNR GCVLTAIHLN VTDLGLGYET KEELIFRYCS GSCDAAETTY DKILKNLSRN RRLVSDKVGQ ACCRPIAFDD DLSFLDDNLV YHILRKHS AK RCGCI.

Application Note

It is recommended to reconstitute the lyophilized Glial Derived Neurotrophic Factor in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED50 was determined by the proliferation of rat C6 cells is < 0.1 ng/ml, corresponding to a specific activity of > 1.0x10⁷ units/mg.

