

32-1239: rGDNF Recombinant Protein

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

Description

Source : Escherichia Coli. Glial derived Neurotrophic Factor Rat Recombinant produced in E.Coli is a homodimer, non-glycosylated, polypeptide chain containing 2 x 134 amino acids and having a total molecular mass of 29.8 kDa. 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 HPLC analysis and by SDS-PAGE.
Content :	GDNF was lyophilized from a sterile solution containing 1xPBS, pH 7.4.
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 :	SPDKQAALP RRENRNQAAA ASPENSRGKG RRGQRGKNRG CVLTAIHLNV TDGLGLGYETK EELIFRYCSG SCESAETMYD KILKNLSRSR RLTSKVGQA CCRPVAFDDD LSFLDDNLVY HILRKHSKR CGCI

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. Recombinant rat GDNF has full biological activity when compared to standards. The ED₅₀, determined by a cell proliferation assay using rat C6 cells, is less than 0.2ng/ml corresponding to a specific activity of more than 5,000,000IU/mg.