

Growth Factor Data Sheet

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Glial cell-derived neurotrophic factor (GDNF) is a small protein that promotes the survival of various neuronal subpopulations in both the central as well as the peripheral nervous systems at different stages of their development. GDNF is a founding member of the GDNF family of ligands (GFL) and has been shown to interact with GFRA2 and GDNF family receptor alpha 1. GDNF (monomer) contains seven conserved cysteine residues, one of which (Cys 101) is used for inter-chain disulfide bridging and the others are involved in intramolecular ring formation known as the cystine knot configuration.

Catalog Number	1170-14
Product Name	GDNF, Human Recombinant Human Glial Cell-derived Neurotrophic Factor GDNF ATF1, ATF2 Astrocyte-derived trophic factor
Source	<i>Escherichia coli</i>
MW	~30.1 kDa (a homodimeric protein consisting of two 134 amino acid non-glycosylated polypeptide chains)
Sequence	SPDKQMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG CVLTAIHLNV TDGLGLYETK EELIFRYCSG SCDAAETTYD KILKNLSRNR RLVSDKVQQA CCRPIAFDDD LSFLDDNLVY HILRKHS AKR CGCI
Accession Number	P39905
Purity	>97 % by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using rat C6 cells is less than 0.1 ng/ml, corresponding to a specific activity of >5.0 × 10 ⁷ IU/mg.
Formulation	Sterile filtered white lyophilized (freeze-dried) powder.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions.