Gdnf
Recombinant Rat Glial Cell Derived Neurotrophic Factor

Catalog No.	CS505A	**Quantity:**	2 µg
	CS505B		10 µg
	CS505C		1 mg

Alternate Names: GDNF, Glial cell line derived neutrophic factor, ATF, Astrocyte-derived trophic factor

Description: Glial cell-derived neurotrophic factor, also known as GDNF is a small protein that potently promotes the survival morphological differentiation of various neuronal which is encoded by the GDNF gene. Furthermore, it may also modulate local neuronal effects in distal regions of the motor neuron. In addition, 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. Recombinant rat GDNF (monomer) contains 135 amino acids residues, which is a disulfide-linked homodimer and it shares 99 % and 93 % aa sequence identity with mouse and human GDNF.

Recombinant Rat GDNF is a homodimeric protein consisting of two 134 amino acid non-glycosylated polypeptide chains.

Gene ID: 25453

Source: *E. coli*

Molecular Weight: 15.2 kDa

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 1 × PBS, pH 7.4.

Purity: >98% by SDS-PAGE and HPLC analyses.

Endotoxin Level: <0.1 EU/µg of Recombinant Rat GDNF, as determined by LAL method.

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 0.2 ng/ml.

Specific Activity: $>5.0 \times 10^6$ IU/mg

Amino Acid Sequence: SPDKQAAALP RRERNRQAAA ASPENSRGKG RRGQRGKNRG CVLTAIHLNV TDLGLGYETK EELIFRYCSG SCEAAETMYD KILKNLSRSR RLTSDKVGQA CCRPVAFDDD LSFLDDSLVY HILRKHSAKR CGCI

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2 -4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

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