Recombinant Rat Glial Cell Derived Neurotrophic Factor

Cat. No. Gdnf-250R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Gdnf produced in*E.coli*is a 30 kDa protein.
Species	Rat
Source	E.coli
Description	GDNF is a disulfide-linked homodimeric neurotrophic factor structurally related to Artemin, Neurturin and Persephin. These proteins belong to the cysteine-knot superfamily of growth factors that assume stable dimeric protein structures. GDNF signals through a multicomponent receptor system, composed of a RET and one of the four GFR α(α1-α4) receptors. GDNF specifically promotes dopamine uptake and survival and morphological differentiation of midbrain neurons. Using Parkinson's disease mouse model, GDNF has been shown to improve conditions such as bradykinesia, rigidity, and postural instability. The functional rat GDNF ligand is a disulfide-linked homodimer, of two 15 kDa polypeptide chains called monomers. Each 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 cysteine knot configuration.
Purity	> 98% by SDS-PAGE and HPLC analysis.
Endotoxin level	< 0.1 ng per μg of IL-5.
Stabilizer	None.

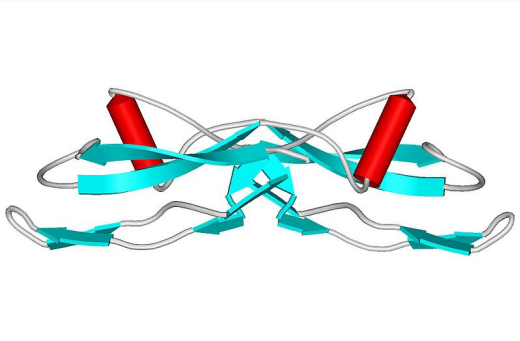
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Formulation	Lyophilized.
Biologically Activity	Determined by its ability to stimulate the proliferation of rat C6 cells.
Stability	The lyophilized protein is stable for at least 2 years from date of receipt at -20℃. Reconstituted GDNF is stable for at least 3 months when stored in working aliquots with a carrier protein at -20℃. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	Gdnf glial cell derived neurotrophic factor [Rattus norvegicus]
Synonyms	Gdnf; glial cell derived neurotrophic factor; Glial cell line derived neutrophic factor; glial cell line derived neurotrophic factor
Gene ID	25453
mRNA Refseq	NM_019139
Protein Refseq	NP_062012
UniProt ID	Q07731
Chromosome Location	q16
Function	glial cell line-derived neurotrophic factor receptor binding; growth factor activity; protein homodimerization activity

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GDNF structure	

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