

Recombinant Rat Gdnf protein

Cat. No. Gdnf-595R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Gdnf protein was expressed in Escherichia coli.
Species	Rat
Source	E.coli
ProteinLength	134
Description	Glial cell-derived neurotrophic factor 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. It is a small protein that potently promotes the survival and morphological differentiation of various neuronal. It may also modulate local neuronal effects in distal regions of the motor neuron. GDNF Recombinant rat GDNF (monomer) contains 135 amino acids residues, which is a disulfide-linked homodimer and it shares 99 % and 93 % a.a. sequence identity with mouse and human GDNF.
Form	Lyophilized from a 0.2µm filtered concentrated solution in 1 × PBS, pH 7.4.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using rat C6 cells is less than 0.2 ng/ml, corresponding to a specific activity of $> 5.0 \times 10^6$ IU/mg.
Molecular Mass	Approximately 29.8 kDa, a homodimeric protein consisting of two 134 amino acid non-glycosylated polypeptide chains.

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AA Sequence	SPDKQAAALPRRERNRQAAAASPENSRGKGRRGQRGKNRGCVLTAIHLNVTDLGL GYETKEELIFRYCSGSCEAAETMYDKILKNLSRSRRLTSDKVGQACCRPVAFDDDL FLDDSLVYHILRKHSKRRCGI
Endotoxin	Less than 0.1 EU/μg of rRtGDNF as determined by LAL method.
Purity	>98% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	Gdnf
Official Symbol	Gdnf
Synonyms	GDNF; glial cell derived neurotrophic factor; glial cell line-derived neurotrophic factor; ATF; astrocyte-derived trophic factor; Glial cell line derived neurotrophic factor; glial cell line derived neurotrophic factor;
Gene ID	25453

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mRNA Refseq	NM_019139
Protein Refseq	NP_062012
UniProt ID	Q07731

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