

Recombinant Rat Cerebral Dopamine Neurotrophic Factor (rRtCDNF)

PrimeGene Technical Data Sheet

Catalog Number:	147-16
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 18.8 kDa, a single non-glycosylated polypeptide chain containing 163 amino acids.
Quantity:	5µg/25µg/1000µg
AA Sequence:	QGLEAGVRSR ADCEVCKEFL NRFYNSLLTR GIDFSVDTIE EELISFCADT KGKENRLCY Y LGATKDSATK ILGEVTRPMS VHMPTVKICE KLKKMDSQIC ELKYEKKLDL ESDLWKMRV AELKQILHSW GEECRACA EK HDYVNLIKEL APKYVETRPQ TEL
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. It is able to enhance neurite outgrowth of E16-E18 rat embryonic cortical neurons when immobilized at 5 - 25 µg/mL on a nitrocellulose-coated microplate.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 0.1 EU/µg of rRtCDNF as determined by LAL method.
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 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Rat Cerebral Dopamine Neurotrophic Factor

Cerebral dopamine neurotrophic factor (CDNF), also known as ARMET-like protein 1, is a protein encoded by the CDFN gene and it is widely expressed in neuronal and non-neuronal tissues. The cerebral dopamine neurotrophic factor (CDNF) also is a novel neurotrophic factor with strong trophic activity on dopaminergic neurons comparable to that of glial cell line-derived neurotrophic factor (GDNF). By research, CDFN prevents the 6-hydroxydopamine (6-OHDA)-induced degeneration of dopaminergic neurons and it might be beneficial for the treatment of parkinson's disease. Recombinant rat CDFN contains 163 amino acid residues and it shares 83 % and 87 % a.a. sequence identity with human and murine CDFN.