

Recombinant Rat Cerebral Dopamine Neurotrophic Factor (rRtCDNF)

ChemWhat Technical Data Sheet (TDS)

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 EVDLWKMRV 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:	ChemWhat Limited in UK offers this branded product for research, development 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 CDNF 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, CDNF 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 CDNF contains 163 amino acid residues and it shares 83 % and 87 % a.a. sequence identity with human and murine CDNF.