

# Recombinant Murine Cerebral Dopamine Neurotrophic Factor (rMuCDNF)

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	127-16
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 18.5 kDa, a single non-glycosylated polypeptide chain containing 163 amino acids.
<b>Quantity:</b>	5µg/25µg/1000µg
<b>AA Sequence:</b>	QGLEAGVGPR ADCEVCKEFL DRFYNSLLSR GIDFSADTIE KELLNFCSDA KGKENRLCY Y LGATTDAATK ILGEVTRPMS VHIPAVKICE KKKMDSQIC ELKYGKKLDL ASVDLWKMRV AELKQILQRW GEECRACA EK SDYVNLIREL APKYVEIYPQ TEL
<b>Purity:</b>	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	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 - 30 µg/mL on a nitrocellulose-coated microplate.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rMuCDNF as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Murine 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 murine CDNF contains 163 amino acid residues and it shares 81 % and 87 % a.a. sequence identity with human and rat CDNF.