Growth Factor Data Sheet

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CDNF is a secreted neurotrophic factor that contains 8 conserved cysteine residues, much like its relative MANF. CDNF and its structural homolog MANF each contain an N-terminal saposin-like lipid binding domain and a carboxyl-terminal domain, which is not homologous to previously characterized protein structures. CDNF is expressed in several tissues, including the embryonic and postnatal brains of mice, as well as the heart, skeletal muscle, and testis. It has been shown to promote survival, growth and function of dopamine specific neurons. CDNF and MANF can prevent 6-OHDA induced degeneration of dopaminergic neurons by triggering survival pathways in a rat experimental model of Parkinson disease.

Catalog Number **Product Name**	**1370-16** **CDNF, Murine** Recombinant Murine Cerebral Dopamine Neurotrophic Factor (CDNF) Arginine-Rich, Mutated in Early Stage Tumors-like (ARMETL1) Conserved Dopamine Neurotrophic Factor
Source	*Escherichia coli*
MW	~18.5 kDa (163 amino acids)
Sequence	QGLEAGVGPR ADCEVCKEFL DRFYNSLLSR GIDFSADTIE KELLNFCSDA KGKENRLCYY LGATTDAATK ILGEVTRPMS VHIPAVKICE KLKKMDSQIC ELKYGKKLDL ASVDLWKMRV AELKQILQRW GEECRACAEK SDYVNLIREL APKYVEIYPQ TEL
Accession Number	Q8CC36
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 - 30 µg/mL on a nitrocellulose-coated microplate
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.