

Recombinant Human CDNF protein(N-His)

Catalog No. PKSH034175

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	ARMETL1
Species	Human
Expression Host	E.coli
Sequence	Gln 27-Leu 187
Accession	Q49AH0
Calculated Molecular Weight	19.3 kDa
Observed molecular weight	18 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Cerebral Dopamine Neurotrophic Factor (CDNF), also known as ARMETL1 (ARMET-like protein 1), is a secreted protein with eight conserved cysteine residues, predicting a unique protein fold and defining a new, evolutionarily conserved protein family. CDNF is a novel neurotrophic factor with strong trophic activity on dopaminergic neurons comparable to that of glial cell line-derived neurotrophic factor (GDNF). CDNF/ARMETL1 is a evolutionary conserved protein which can protect and restore the function of dopaminergic neurons in the rat model of Parkinson's disease, suggesting that CDNF might be beneficial for the treatment of Parkinson's disease. CDNF is widely expressed in neurons in several brain regions including cerebral cortex, hippocampus, substantia nigra, striatum and cerebellum. Human CDNF is glycosylated and secreted from transiently transfected cells. CDNF promotes the survival, growth, and function of dopamine-specific neurons and is expressed in brain regions that undergo cocaine-induced neuroplasticity.

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