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Recombinant Human CDNF/ARMETL1 Protein (His Tag)

Catalog Number: PDMH100359

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

Description

Species Human

Source HEK293 Cells-derived Human CDNF protein Gln25-Leu187, with an C-terminal His

Calculated MW21.7 kDaObserved MW17 kDaAccessionQ49AH0

Bio-activity Not validated for activity

Properties

Purity > 95% as determined by reducing SDS-PAGE.

Endotoxin < 1.0 EU/mg 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.

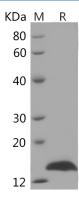
Formulation Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

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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