

## **CDNF**, human recombinant

Catalogue # P-100-100

Synonyms: Cerebral dopamine neurotrophic factor – CDNF;

ARMETL1

Uniprot ID: Q49AH0

Source: Human

MW: Approximately 18.5 kDa, a single non-

glycosylated polypeptide chain containing 163

amino acids

Host: CHO-based cell line (expressed by QMCF

Technology)

Purification: Purified by ion-exchange chromatography and

gel-filtration from serum-free CHO growth media. Protein is sterile-filtrated through 0.22 µm filter

Purity: >90%

Concentration: 1 mg/ml Concentration of the protein is

determined by BCA Protein Analysis kit (Pierce).

BSA was used as a standard

Buffer: PBS pH 7.4

Endotoxine: Less than 1EU/mg of protein as determined by

LAL method

Bioproperties: Protein is biologically active. Suitable for cell

culture and *in vivo* testing. Biological activity of human CDNF was tested in rat 6-OHDA model of

Parkinson's disease and shown to be both neuroprotective and neurorestorative (for

methods see: Lindholm et al. 2007; Voutilainen et

al. 2011)

QC: SDS-PAGE and Western-Blot analysis (Figure 1

and 2, respectively).

Mass-spectroscopy: Purified human CDNF is characterized as homogenous material by mass-

spectroscopy

Related Products: Polyclonal and monoclonal antibodies against

human CDNF. For more information please visit: <a href="https://www.www.icosagen.com/antibodies">www.www.icosagen.com/antibodies</a>, human neural growth factors. For more information please visit: <a href="https://www.www.icosagen.com/proteins">www.www.icosagen.com/proteins</a>

Shipping: Shipped on dry ice

Storage: Store at -70°C upon receipt. Recommended to

aliquot into smaller quantities. Avoid repeated

freeze-thaw cycles

Background: CDNF is a trophic factor for midbrain dopamine

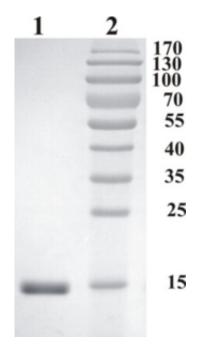
neurons in vivo. It prevents the 6-OHDA-(Lindholm et al. 20007; Voutilainen et al., 2011) and MPTP-induced degeneration (Airavaara et al., 2012) of dopamine neurons in rodent models

of Parkinson's disease. When administered after 6-OHDA or MPTP –lesioning it restores the

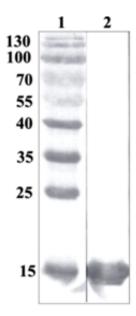
dopaminergic function and prevents degeneration of dopamine neurons in substantia nigra pars

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**Figure 1.** SDS-PAGE analysis of human CDNF visualized by PageBlue protein staining solution (Fermentas). Line 1. 4 μg of CDNF; Line 2. Protein size marker (PageRuler Prestained protein ladder, Fermentas).



**Figure 2.** Western Blot testing of human CDNF using anti-CDNF polyclonal antibody (Icosagen AS Cat. No 300-100). Line 1. PageRuler Prestained Protein Ladder (#SM0671 Fermentas). Line 2. Recombinant CDNF expressed into the supernatant of CHO cell culture medium.