

CDNF, Human Recombinant

CATALOG #:	7127-10	10 µg
	7127-50	50 µg
ALTERNATE NAMES:	Cerebral dopamine neurotrophic factor, ARMETL1	
SOURCE:	E.coli	
PURITY:	≥ 98% by SDS-PAGE gel and HPLC analyses	
MOL. WEIGHT:	18.5 kDa	
ENDOTOXIN LEVEL:	< 0.1 ng/µg of protein (<1EU/µg).	
FORM:	Lyophilized	
FORMULATION:	Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.0.	
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:

CDNF is a secreted neurotrophic factor that is expressed in brain, neuronal and certain non-neuronal tissues. It has been shown to promote survival, growth and function of dopamine specific neurons. 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 and MANF can prevent 6-OHDA induced degeneration of dopaminergic neurons by triggering survival pathways in a rat experimental model of Parkinson disease. Recombinant human CDNF is an 18.5 kDa protein consisting of 162 amino acids including 8 cysteine residues.

BIOLOGICAL ACTIVITY:

Determined by its ability to stimulate the proliferation of rat C6 cells. The expected ED₅₀ for this effect is 15-25 µg/ml.

AMINO ACID SEQUENCE:

MQEAGGRPGA DCEVCKEFLN RFYKSLIDRG VNFSLDTIEK ELISFCLDTK
GKENRLCYYL GATKDAATKI LSEVTRPMSV HMPAMKICEK LKKLDSQICE
LKYEKTDLA SVDLRKMVA ELKQILHSWG EECRACAEKT DYNVLIQELA
PKYAATHPKT EL

RELATED PRODUCTS:

- ProBDNF, human recombinant (Cat. No. 4273-10, 50, 1000)
- NGF-beta, human recombinant (Cat. No. 4303R-10, 20, 1000)
- NGF-beta, human recombinant (CHO) (Cat. No. 4303-20, 1000)
- NGF-beta, murine recombinant (Cat. No. 4304-5, 10, 20, 1000)
- Recombinant human ProNT-3 (Cat. No. 4272-10, 50, 100)
- Recombinant human ProNGF-3 (Cat. No. 4274-10, 50, 100)
- BDNF Antibody (Cat. No. 5004- 100)

FOR RESEARCH USE ONLY! Not to be used in humans.