

Active Recombinant Human Brain Derived Neurotrophic Factor

Cat. No. BDNF-022H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Brain-Derived Neurotrophic Factor produced in E.Coli is a homodimer , non-glycosylated, polypeptide chain containing 2 x 119 amino acids and having a total molecular mass of 26,984 Dalton.
Species	Human
Source	E.coli
Description	BDNF is a member of the nerve growth factor family of trophic factors. Polyclonal antibodies raised against murine NGF have been shown to cross-react with both NT-3 and BDNF.
Form	Lyophilized with no additives.
Purity	Purity Greater than 97% as determined by: Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Bio-activity	BDNF is fully biologically active when compared to standard. The ED50 is calculated by the dose-dependant induction of ACHE (acetylcholine esterase) in rat basal forebrain primary septal culture with a range of 20 - 40 ng/ml.
Physical Appearance	Sterile Filtered white lyophilized (freeze-dried) powder.
Solubility	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is

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recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg"s/ml, which can be further diluted into other aqueous solutions.

Purity Greater than 97% as determined by

Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.

Protein Content determined by

UV spectroscopy at 280 nm. Analysis by RP-HPLC calibrated against a known standard. Quantitation on SDS-PAGE against a known standard.

Endotoxin Level

Endotoxin level as measured by LAL is <0.01ng/ug or <0.1EU/ug.

Amino acid sequence

MHSDPARRGE LSVCDSEW VTAADKKTAV DMSGGTVTVL EKVPVSKGQL
KQYFYETKCN PMGYTKEGCR GIDKRHWNSQ CRTTQSYVRA LTMDSKKRIG
WRFIRIDTSC VCTLTIKRGR

Storage

Lyophilized product is very stable at -20 degrees. Reconstituted material should be aliquoted and frozen at -20. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

GENE INFORMATION

Gene Name

BDNF brain-derived neurotrophic factor [Homo sapiens]

Official Symbol

BDNF

Synonyms

BDNF; MGC34632; Abrineurin; neurotrophin; Brain-derived neurotrophic factor; NP_733927.1 5` and 3` partial

Gene ID

627

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mRNA Refseq	NM_001143806
Protein Refseq	NP_001137278
MIM	113505
UniProt ID	P23560
Chromosome Location	11p13
Pathway	Huntington"s disease; MAPK signaling pathway; Neurotrophin signaling pathway
Function	Growth factor activity
PDBrendering based on 1bnd.	