

# Active Recombinant Human Brain Derived Neurotrophic Factor

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

## SPECIFICATION

<b>Product Overview</b>	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.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	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.
<b>Form</b>	Lyophilized with no additives.
<b>Purity</b>	Purity Greater than 97% as determined by: Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
<b>Bio-activity</b>	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.
<b>Physical Appearance</b>	Sterile Filtered white lyophilized (freeze-dried) powder.
<b>Solubility</b>	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](#)

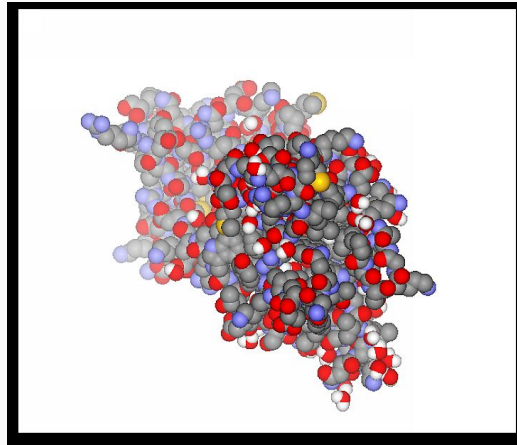
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mRNA Refseq	<a href="#">NM_001143806</a>
Protein Refseq	<a href="#">NP_001137278</a>
MIM	<a href="#">113505</a>
UniProt ID	<a href="#">P23560</a>
Chromosome Location	11p13
Pathway	Huntington"s disease; MAPK signaling pathway; Neurotrophin signaling pathway
Function	Growth factor activity

PDBrendering based on 1bnd.



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