

# Recombinant Human Brain-derived Neurotrophic Factor

Cat. No. BDNF-334H Lot. No. (See product label)

## SPECIFICATION

**Species** Human

**Source** Sf21 Cells

**Description** BDNF is a member of the NGF family of neurotrophic growth factors. Like other members of this family, BDNF supports neuron proliferation and survival. BDNF acts on certain neurons of the central nervous system and the peripheral nervous system, helping to support the survival of existing neurons and encourage the growth and differentiation of new neurons and synapses. In the brain, it is active in the hippocampus, cortex, and basal forebrain-areas vital to learning, memory, and higher thinking.

**Molecular Weight** The predicted molecular weight of Recombinant Human BDNF is Mr 13.7 and 12.8 kDa (N-terminal truncated). However, the actual molecular weight as observed by migration on SDS Page is Mr 13.5 and 12.8 kDa (N-terminal truncated).

**State Of Matter** Lyophilized.

**Purity** >97% by SDS Page and analyzed by silver stain.

**Endotoxin** <1.0 EU/g as determined by the LAL method.

**Biological Activity** The biological activity of Human BDNF was determined by its ability to stimulate proliferation of the TrkB transfected cell line, Baf-TrkB. The expected ED50 for this effect is typically 3 - 10 ng/mL.

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**Storage And Stability**

This lyophilized protein is stable for six to twelve months when stored desiccated at -20°C to -70°C. After aseptic reconstitution, this protein may be stored at 2°C to 8°C for one month or at -20°C to -70°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles.

**GENE INFORMATION**

<b>Gene Name</b>	BDNF brain-derived neurotrophic factor [ Homo sapiens ]
<b>Synonyms</b>	BDNF; brain-derived neurotrophic factor; MGC34632; Abrineurin; neurotrophin; Brain-derived neurotrophic factor
<b>Gene ID</b>	627
<b>mRNA Refseq</b>	NM_001143805
<b>Protein Refseq</b>	NP_001137277
<b>MIM</b>	113505
<b>UniProt ID</b>	P23560
<b>Chromosome Location</b>	11p13
<b>Pathway</b>	Huntington"s disease; MAPK signaling pathway; Neurotrophin signaling pathway
<b>Function</b>	Growth factor activity

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