

Active Recombinant Human BDNF Protein

Cat. No. BDNF-144H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Pro-Brain-Derived Neurotrophic Factor is produced by our E.coli expression system and the target gene encoding Ala19-Arg247(R125A,R127A,R128A) is expressed.
Species	Human
Source	E.coli
ProteinLength	19-247 a.a.
Description	The precursor form of Brain-Derived Neurotrophic Factor (pro-BDNF) interacts preferentially with the pan-neurotrophin receptor p75 (p75NTR) and vps10p domain-containing receptor sortilin and induces neuronal apoptosis, whereas mature BDNF selectively binds with high affinity to the TrkB kinase receptor and promotes the survival, growth and differentiation of neurons. As proneurotrophins and mature neurotrophins elicit opposite biological effects, Pro-BDNF cleavage in the neuronal system is regulated in a specific and cell-context dependent manner. Pro-BDNF plays important role in negative regulation of neurotrophic actions in the brain.
Form	Lyophilized from a 0.2 um filtered solution of 20mM PB, 250mM NaCl, pH 7.2.
Bio-activity	Immobilized Human pro-BDNF at 2ug/ml (100 µl/well) can bind Human TrkB-His. The ED50 of Human pro-BDNF is 0.5-4 ug/ml.
Molecular Mass	Predicted Molecular Weight: 25.6kDa

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	Apparent Molecular Weight: 28kDa, reducing conditions.
AA Sequence	Ala19-Arg247
Endotoxin	Less than 0.1 ng/ug (1 EU/ug).
Purity	>95%
Storage	Lyophilized protein should be stored at < -20 centigrade, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7 centigrade for 2-7 days. Aliquots of reconstituted samples are stable at < -20 centigrade for 3 months.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Quality Statement	Purity Greater than 95% as determined by reducing SDS-PAGE.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

GENE INFORMATION

Gene Name	BDNF brain derived neurotrophic factor [Homo sapiens (human)]
Official Symbol	BDNF
Synonyms	Brain-Derived Neurotrophic Factor; Abrineurin; ANON2; BULN2

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Gene ID	627
mRNA Refseq	NM_001143805.1
Protein Refseq	NP_001137277.1
MIM	113505
UniProt ID	P23560

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