



Product Datasheet

Product Name	Recombinant Human Brain-Derived Neurotrophic Factor
Cata No	CB500109
Source	Escherichia Coli
Synonyms	BDNF, MGC34632.

Description

BDNF promotes the survival of neuronal populations that are all located either in the central nervous system or directly connected to it. Major regulator of synaptic transmission and plasticity at adult synapses in many regions of the CNS. The versatility of bdnf is emphasized by its contribution to a range of adaptive neuronal responses including long-term potentiation (LTP), long-term depression (LTD), certain forms of short-term synaptic plasticity, as well as homeostatic regulation of intrinsic neuronal excitability.

Brain-Derived Neurotrophic Factor Human Recombinant 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.

BDNF Human Recombinant is purified by proprietary chromatographic techniques.

Purity

Greater than 96.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Storage

Lyophilized BDNF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Brain-derived Neurotrophic Factor should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Formulation

The protein was lyophilized after dialysis against 20mM sodium citrate buffer pH=5.

Solubility

It is recommended to reconstitute the lyophilized Brain-derived Neurotrophic Factor in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Biological Activity

The ED₅₀, calculated by the dose-dependant induction of AChE (acetylcholine esterase) in rat basal forebrain primary septal culture is 50 ng/ml.

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