

# Product Data Sheet

# **BDNF Protein, Human (CHO)**

Cat. No.:	HY-P7116
Synonyms:	rHuBDNF/Brain-derived neurotrophic factor; Abrineurin
Species:	Human
Source:	СНО
Accession:	P23560 (H129-R247)
Gene ID:	627
Molecular Weight:	12-14 kDa

PROPERTIES	
AA Sequence	HSDPARRGEL SVCDSISEWV TAADKKTAVD MSGGTVTVLE KVPVSKGQLK QYFYETKCNP MGYTKEGCRG IDKRHWNSQC RTTQSYVRAL TMDSKKRIGW RFIRIDTSCV CTLTIKRGR
Biological Activity	The ED <sub>50</sub> is <4 μg/ml as measured by C6 cells.
Appearance	Lyophilized powder
Formulation	Lyophilized after extensive dialysis against PBS.
Endotoxin Level	<0.2 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

#### DESCRIPTION

## Background Recombinant Human BDNF/Brain-derived neurotrophic factor is a neurotrophin binding to the high-affinity tropomyosinrelated receptor kinase B (TrkB) receptor to regulate neurodevelopmental processes, including neuronal survival, neuronal differentiation, and synaptic plasticity<sup>[1]</sup>. Brain-derived neurotrophic factor (BDNF) is one of the most abundant neurotrophins in the mammalian central nervous system that promotes neuronal survival and differentiation. BDNF plays crucial roles in the cardiovascular system<sup>[2]</sup>.

### REFERENCES

[1]. Li M, et al. Recombinant human brain-derived neurotrophic factor prevents neuronal apoptosis in a novel in vitro model of subarachnoid hemorrhage. Neuropsychiatr Dis Treat. 2017 Apr 3;13:1013-1021.

[2]. Hang P, et al. Brain-derived neurotrophic factor attenuates doxorubicin-induced cardiac dysfunction through activating Akt signalling in rats. J Cell Mol Med. 2017 Apr;21(4):685-696.

#### Caution: Product has not been fully validated for medical applications. For research use only.

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