Recombinant Human BDNF

Cat No:HR2R1179

For research use only

Overview

Quantity	10 ?g
Gene Symbol	BDNF
Gene ID	627
Accession	P23560
Alternative Name	BDNF, Abrineurin Recombinant Human Brain-Derived Neurotrophic Factor (BDNF)
Species	Human
Source	E. coli
Description	BDNF is found in neurons of the central nervous system. It is expressed predominantly in hippocampus, cortex, and synapses of the basal forebrain. The biological activity of BDNF is mediated by a receptor that belongs to the trk family of receptors encoding a tyrosine-specific protein kinase. BDNF only binds weakly to the gp140trk receptor (to which NGF binds with high affinity), and it binds to the NGF receptor known as LNGFR. BDNF selectively supports the survival of primary sensory neurons and retinal ganglia. The factor supports survival and differentiation of certain cholinergic neurons and also some dopaminergic neurons in vitro. BDNF does not appear to act on sympathetic ganglia. In specific neurons of the central nervous system located in the hippocampus and the cortex the synthesis of BDNF is influenced by neuronal activity either positively (glutamate transmitter system) or negatively (GABA transmitter system).
Functions	The ED(50) was determined by the dose-dependent proliferation of rat C6 cells, and was found to be in the range of 0.5 ug/mL.
Formulation	Recombinant Brain Derived Neurotrophic Factor was lyophilized from a 0.2 ?m filtered citric acid, pH 5.7.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	14
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

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