

**Product:** **Recombinant Human BDNF**  
**Cat #: 300-104P**  
Powder

Description	Brain Derived Neurotrophic Factor (BDNF) is a nerve growth factor that supports neuron growth and survival. BDNF shares identical domains with two other neurotrophic factors known as, $\beta$ -NGF and NT-3 (neurotrophin-3). BDNF binds with low affinity to a receptor known as LNGFR, which also binds NGF and NT-3, but mediates survival function by signaling through a high affinity receptor known as gp145/TrkB. Human, mouse, rat and pig BDNF are all cross-reactive.
MW	Non-glycosylated homodimer, containing two 119 amino acid chains, with a total molecular weight of 27 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant human BDNF is lyophilized with no additives.
Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity is determined by the dose-dependent proliferation of C6 cells and is typically between 0.5-1.5 $\mu$ g/mL.
Endotoxin Level	Measured by kinetic LAL analysis and is typically $\leq$ 1 EU/ $\mu$ g protein.
AA Sequence	MHSDPARRGE LSVCDISEW VTAADKKTAV DMSGGTVTVL EKVPVSKGQL KQYFYETKCN PMGYTKEGCR GIDKRHWNSQ CRTTQSYVRA LTMSKKRIG WRFIRIDTSC VCTLTIKRGR

Purity greater than 97% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**