



**Catalog Number:** PR29001

**Product Type:** Recombinant Protein

**Source:** *E. Coli*

**Amino Acid Sequence:** MHSDPARRGE LSVCDISEW VTAADKKTAV DMSGGTVTVL EKVPVSKGQL  
KQYFYETKCN PMGYTKEGCR GIDKRHWNSQ CRTTQSYVRA LTMDSKKRIG  
WRFIRIDTSC VCTLTIKRGR

**Description:** hBDNF produced in *E. coli* is a homodimer, non-glycosylated, polypeptide chain which contains 2 x 119 amino acids and has a total molecular mass of 26.89 kDa.

**Protein Content determined by:** UV spectroscopy at 280 nm.  
Analysis by RP-HPLC calibrated against a known standard.  
Quantitation on SDS-PAGE against a known standard..

**Activity:** hBDNF is fully biologically active when compared to a standard. The ED<sub>50</sub> is calculated by the dose-dependent induction of ACHE (acetylcholine esterase) in rat basal forebrain septal culture and is within a range of 20 - 40 ng/ml.

**Endotoxin Level:** As measured by LAL is <0.01ng/ug or <0.1EU/ug.

**Purity:** >97% as determined by:  
Analysis by RP-HPLC.  
Reducing and non-reducing SDS-PAGE

**Format:** Lyophilized with no additives.

**Reconstitution:** Centrifuge vial before opening. When reconstituting the product, gently pipette 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. It can be further diluted into other aqueous solutions.

**Shipping Conditions:** Can be shipped ambient. Product should be stored at -20° C upon receipt.

**Storage:** Product is stable for up to 3 years from manufacturing date, when stored lyophilized at -20° C. Reconstituted material should be aliquoted and frozen at -20° C. It is Recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

**Avoid multiple freeze-thaw cycles**

### References:

Bárbara Frias, João Santos, Marlene Morgado, Mónica Mendes Sousa, Susannah M.Y. Gray, Karen D. McCloskey, Shelley Allen, Francisco Cruz, and Célia Duarte Cruz. The Role of Brain-Derived Neurotrophic Factor (BDNF) in the Development of Neurogenic Detrusor Overactivity (NDO). The Journal of Neuroscience, 4 February 2015, 35(5): 2146-2160; doi: 10.1523/JNEUROSCI.0373-14.2015.

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