

## BDNF

### Recombinant Human Brain-Derived Neurotrophic Factor

|             |         |           |        |
|-------------|---------|-----------|--------|
| Catalog No. | CRB600A | Quantity: | 2 µg   |
|             | CRB600B |           | 10 µg  |
|             | CRB600C |           | 1.0 mg |
|             | CRB600D |           | 100 µg |

**Alternate Names:** BDNF, Abrineurin, ANON2, BULN2

**Description:** Brain Derived Neurotrophic Factor, or 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.

Recombinant human BDNF is a non-glycosylated homodimer, containing two 120 amino acid chains.

**Gene ID:** 627

**UniProtKB:** P23560

**Source:** *E. coli*

**Molecular Weight:** Homodimer (non-covalent), 13.6/27.3 kDa (120/240 aa)

**Formulation:** Lyophilized from a sterile filtered solution containing 0.1% Trifluoroacetic Acid (TFA).

**Purity:** > 95% by reducing and non-reducing SDS-PAGE

**Endotoxin Level:**  $\leq 1$  EU/µg

**Biological Activity:** As determined by the dose dependent proliferation of C6 cells, ED50 is 1.7 µg/mL..

**Specific Activity:**  $5.9 \times 10^2$  U/mg

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

**Reconstitution:** **Centrifuge vial prior to opening.** Add sterile distilled water to a recommended concentration of 0.1 mg/mL and gently pipet solution up and down sides of vial. **DO NOT VORTEX.** Allow several minutes for complete reconstitution.

**Storage & Stability:** **Upon receipt,** store desiccated at -20 °C for up to one year. **Upon reconstitution,** the preparation is stable for up to one month at 2-8 °C. **For long term storage** reconstitute in working aliquots containing 0.1% BSA and store at -80 °C. **Avoid repeated freeze-thaw cycles.**

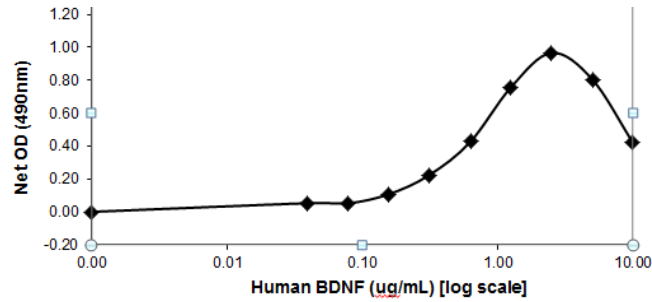
Human BDNF Induced Proliferation of C6 Cells



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