

HUMAN/MURINE/RAT BDNF PROTEIN

Cat.#: 12030

Product Name: Human/Murine/Rat BDNF Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: Brain-Derived Neurotrophic Factor;BDNF;Abrineurin

Target: BDNF

UNIPROT ID: P23560

Description: Recombinant Human Brain-Derived Neurotrophic Factor is produced by our E.coli expression system and the target gene encoding His129-Arg247 is expressed.

Background: Brain-Derived Neurotrophic Factor (BDNF) is a member of the neurotrophin family. Along with other structurally related neurotrophic factors NGF, NT-3 and NT-4, BDNF binds with high affinity to the TrkB kinase receptor. It also binds with the LNGFR (for low-affinity nerve growth factor receptor, also known as p75). BDNF promotes the survival, growth and differentiation of neurons. It serves as a major regulator of synaptic transmission and plasticity at adult synapses in many regions of the CNS. BDNF expression is altered in neurodegenerative disorders such as Parkinson's and Alzheimer's disease.

Species/Host: E.coli

Molecular Weight: 13 KDa

Molecular Characterization: Not available

Purity: Greater than 95% as determined by reducing SDS-PAGE.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

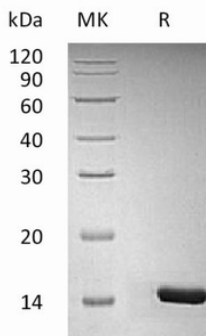


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.

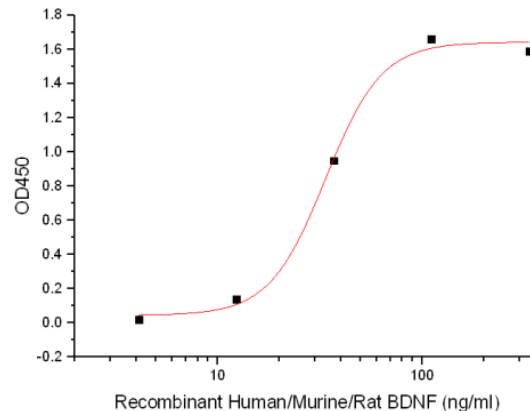


Figure 2. Immobilized Human TrkB-His at 2ug/ml (100 µl/well) can bind Human BDNF*: Biotinylated by NHS-biotin prior to testing. The ED50 of Human BDNF* is 47.58 ng/ml.