A Reliable Research Partner in Life Science and Medicine

# Recombinant Human/Mouse/Rat BDNF Protein

Catalog Number: PKSH033808

Note: Centrifuge before opening to ensure complete recovery of vial contents.

## Description

Species Human/Mouse/Rat

**Source** E.coli-derived Human/Mouse/Rat BDNF protein His 129-Arg247, with an C-terminal

His

Calculated MW14.5 kDaObserved MW14 kDaAccessionP23560

**Bio-activity** Measure by its ability to induce proliferation in BaF3 cells transfected with TrkB. The

 $ED_{50}$  for this effect is <2 ng/mL.

### **Properties**

**Purity** > 98 % as determined by reducing SDS-PAGE.

Endotoxin < 0.1 EU per µg of the protein as determined by the LAL method.

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.

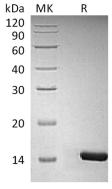
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

### Data



> 98 % as determined by reducing SDS-PAGE.

# 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.

### For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017