



# Recombinant Protein Technical Manual

**Recombinant  
Human/Mouse/Rat/Cynomolgus/Canine BDNF  
Protein (Active)  
RPES0750**

## Product Data:

**Product SKU:** RPES0750

**Size:** 5µg

**Species:** Mouse/Human/Rat

**Expression host:** CHO Stable Cells

**Uniprot:** P21237

## Protein Information:

**Molecular Mass:** 13.5 kDa

**AP Molecular Mass:**

**Tag:**

**Bio-activity:** Measured by its ability to bind biotinylated human TrkB-His in functional ELISA.2. Measured by its ability to bind Human TrkB-Fch in functional ELISA.3. Measured by its ability to bind biotinylated mouse TrkB-His in functional ELISA.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 PBS

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

**Application:** Functional ELISA

**Synonyms:** BDNF

## Immunogen Information:

**Sequence:** Met 1-Arg249

## Background:

BDNF is a member of the nerve growth factor family. It is highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. It also can be detected in heart, lung, skeletal muscle, testis, prostate and placenta. BDNF is induced by cortical neurons, and is necessary for survival of striatal neurons in the brain. During development, BDNF promotes the survival and differentiation of selected neuronal populations of the peripheral and central nervous systems. It participates in axonal growth, pathfinding and in the modulation of dendritic growth and morphology. It functions as the major regulator of synaptic transmission and plasticity at adult synapses in many regions of the CNS. The versatility of BDNF is emphasized by its contribution to a range of adaptive neuronal responses including long-term potentiation (LTP), long-term depression (LTD), certain forms of short-term synaptic plasticity, as well as homeostatic regulation of intrinsic neuronal excitability.