

**Recombinant Mouse / Recombinant Human / Rat / Cynomolgus / Canine BDNF Protein**

**Cat.NO.: TP04789**

3th Edition

**Synonyms:**BDNF

**Description:**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.

**Form:**PBS

**Molecular Weight:**13.5 kDa

**Sequences:**Met 1-Arg249

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.