

## 脑源神经营养因子单克隆抗体

产品货号： mlM2291

英文名称： BDNF

中文名称： 脑源神经营养因子单克隆抗体

别名： Abrineurin; BDNF; BDNF; BDNF\_HUMAN; Brain Derived Neurotrophic Factor; Brain-derived neurotrophic factor; MGC34632; MGC34632; Neurotrophin.

研究领域： 细胞生物 神经生物学 信号转导 生长因子和激素 转录调节因子 激酶和磷酸酶 细胞因子

抗体来源： Mouse

克隆类型： Monoclonal

克隆号： 3B2

交叉反应： Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Guinea Pig,

产品应用： ELISA=1:500-1000

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量： 13/27kDa

细胞定位： 分泌型蛋白

性状： Lyophilized or Liquid

浓 度 : 1mg/ml

免 疫 原 : Recombinded human BDNF full length protein:

亚 型 : IgG

纯化方法 : affinity purified by Protein G

储 存 液 : 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件 : Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed : PubMed

产品介绍 : Neurotrophins function to regulate naturally occurring cell death of neurons during development. The prototype neurotrophin is nerve growth factor (NGF), originally discovered in the 1950s as a soluble peptide promoting the survival of, and neurite outgrowth from, sympathetic ganglia. More recently, three additional structurally homologous neurotrophic factors have been identified. These include brain-derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3) and neurotrophin-4 (NT-4), also designated NT-5. These various neurotrophins stimulate the in vitro survival of distinct but partially overlapping populations of neurons. The Trk A receptor is the preferential receptor for NGF, but also binds NT-3 and NT-4. The Trk B receptor binds equally well to both BDNF and NT-4 and to a lesser extent NT-3, while the Trk C receptor only binds NT-3. BDNF promotes the survival of neuronal populations that are all located either in the central nervous system or directly connected to it. Belongs to the NGF-beta family.

#### **Function:**

During development, promotes the survival and differentiation of selected neuronal populations of the peripheral and central nervous systems. Participates in axonal growth, pathfinding and in the modulation of dendritic growth and morphology. 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.

**Subunit:**

Monomers and homodimers. Binds to NTRK2/TRKB.

**Subcellular Location:**

Secreted.

**Tissue Specificity:**

Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta.

**Post-translational modifications:**

The propeptide is N-glycosylated and glycosulfated.

**DISEASE:**

Defects in BDNF are a cause of congenital central hypoventilation syndrome (CCHS) [MIM:209880]; also known as congenital failure of autonomic control or Ondine curse. CCHS is a rare disorder characterized by abnormal control of respiration in the absence of neuromuscular or lung disease, or an identifiable brain stem lesion. A deficiency in autonomic control of respiration results in inadequate or negligible ventilatory and arousal responses to hypercapnia and hypoxemia. CCHS is frequently complicated with neurocristopathies such as Hirschsprung disease that occurs in about 16% of CCHS cases.

**Similarity:**

Belongs to the NGF-beta family.

**SWISS:**

P23560

**Gene ID:**

627

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.