

**BDNF Antibody** 

Rabbit mAb Catalog # AP90580

### Specification

# **BDNF Antibody - Product Information**

ApplicationWB, IHC, ICCPrimary AccessionP23560ReactivityRatClonalityMonoclonalOther NamesBDNF;MGC34632;Abrineurin; ANON2; Brain Derived Neurotrophic Factor; Neurotrophin;BULN2;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	27818 Da

#### **BDNF Antibody - Additional Information**

Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human BDNF
Description	BDNF 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. 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

# **BDNF Antibody - Protein Information**

Name BDNF {ECO:0000303|PubMed:28397838, ECO:0000312|HGNC:HGNC:1033}

Function



Important signaling molecule that activates signaling cascades downstream of NTRK2 (PubMed:<a href="http://www.uniprot.org/citations/11152678" target="\_blank">11152678</a>). 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.

Cellular Location Secreted

#### **Tissue Location**

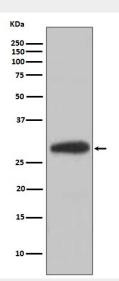
Detected in blood plasma and in saliva (at protein level) (PubMed:11152678, PubMed:19467646). Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta

#### **BDNF Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **BDNF Antibody - Images**



Western blot analysis of extracts of Mouse heart lysate, using BDNF antibody