

# Anti-BDNF Antibody

Catalog # ABO10509

# Specification

# Anti-BDNF Antibody - Product Information

ApplicationWBPrimary AccessionP23560HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for Brain-derived neurotrophic factor(BDNF) detection. Tested withWB in Human;Mouse;Rat.Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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

Gene ID 627

**Other Names** Brain-derived neurotrophic factor, BDNF, Abrineurin, BDNF

Calculated MW 27818 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

Subcellular Localization Secreted.

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

Protein Name Brain-derived neurotrophic factor(BDNF)

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the N-terminal of human BDNF(129-148aa HSDPARRGELSVCDSISEWV), identical to the related rat and mouse sequences.

Purification



# Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the NGF-beta family.

# Anti-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

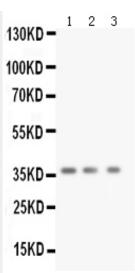
#### Anti-BDNF Antibody - Protocols

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>

**Anti-BDNF Antibody - Images** 





Anti-BDNF antibody, ABO10509, Western blottingAll lanes: Anti BDNF (ABO10509) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 28KDObserved bind size: 37KD

### **Anti-BDNF Antibody - Background**

Brain derived neurotrophic factor(BDNF) is a member of the neurotrophin family of growth factors that includes NGF, NT3, and NT4. BDNF is a prosurvival factor induced by cortical neurons that is necessary for survival of striatal neurons in the brain. BDNF is expressed within peripheral ganglia and is not restricted to neuronal target fields. BDNF has been purified and shown to reduce the amount of naturally occurring neuronal cell death in portions of the peripheral nervous system.