

# Anti-BDNF Antibody

Catalog # ABO10509

## Product Information

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|--------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                                                       |
| <b>Primary Accession</b> | <a href="#">P23560</a>                                                                                                   |
| <b>Host</b>              | Rabbit                                                                                                                   |
| <b>Reactivity</b>        | Human, Mouse, Rat                                                                                                        |
| <b>Clonality</b>         | Polyclonal                                                                                                               |
| <b>Format</b>            | Lyophilized                                                                                                              |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Brain-derived neurotrophic factor(BDNF) detection. Tested with WB in Human;Mouse;Rat. |
| <b>Reconstitution</b>    | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                     |

## Additional Information

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| <b>Gene ID</b>                  | 627                                                                                                                                                                |
| <b>Other Names</b>              | Brain-derived neurotrophic factor, BDNF, Abrineurin, BDNF                                                                                                          |
| <b>Calculated MW</b>            | 27818                                                                                                                                                              |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat                                                                                                                     |
| <b>Subcellular Localization</b> | Secreted.                                                                                                                                                          |
| <b>Tissue Specificity</b>       | Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta. . |
| <b>Source</b>                   | Eukaryota                                                                                                                                                          |
| <b>Protein Name</b>             | Brain-derived neurotrophic factor(BDNF)                                                                                                                            |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg Na <sub>3</sub> .                                       |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence at the N-terminal of human BDNF(129-148aa HSDPARRGELSVCDISEWV), identical to the related rat and mouse sequences.  |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                       |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                            |
| <b>Storage</b>                  | At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also                                                                                   |

## Sequence Similarities

be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.  
Belongs to the NGF-beta family.

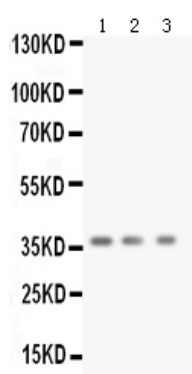
## Protein Information

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|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | BDNF {ECO:0000303   PubMed:28397838, ECO:0000312   HGNC:HGNC:1033}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Function</b>          | Important signaling molecule that activates signaling cascades downstream of NTRK2 (PubMed: <a href="#">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. |
| <b>Cellular Location</b> | Secreted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Tissue Location</b>   | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## 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.

## 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.