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Anti-BDNF (RABBIT) Antibody
BDNF Antibody
Catalog # ASR4940

Specification

Anti-BDNF (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This purified antibody has been tested in western blotting and suitable for ELISA. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 27 kDa in size corresponding to the mature human BDNF protein by western blotting in appropriate cell lysate or extract.**
Physical State	**Lyophilized**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This IgG fraction antibody was prepared from rabbit antiserum after repeated immunizations with recombinant truncated human BDNF protein produced in E.coli.**
Reconstitution Volume	**100 µL**
Reconstitution Buffer	**Restore with deionized water (or equivalent)**

Anti-BDNF (RABBIT) Antibody - Additional Information

Gene ID 627

Other Names
627

Purity
This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for human BDNF protein. A BLAST analysis was used to suggest cross-reactivity with BDNF from human sources based on 100% homology with the immunizing sequence. Based on high to 100% homology, there is a chance of cross-reactivity to BDNF from a wide variety of animals. Cross-reactivity with BDNF from other sources has not been determined.

Storage Condition
Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after

standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-BDNF (RABBIT) 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:11152678). 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 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-BDNF (RABBIT) Antibody - Images

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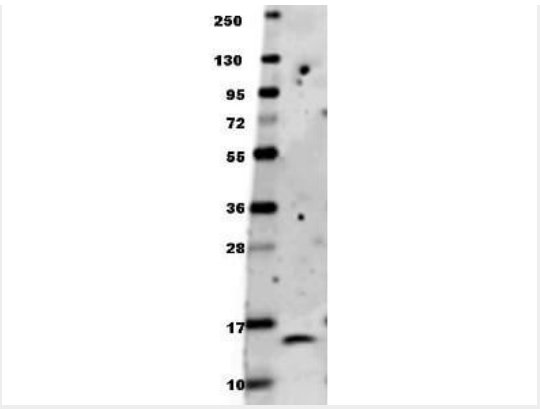

Anti-human BDNF antibody in western blot shows detection of recombinant human BDNF raised in E.coli. Recombinant truncated (0.1 µg, 27 kDa) protein was loaded onto and resolved by SDS-PAGE, then transferred to nitrocellulose. The membrane was blocked with 1% BSA in TBST for 30 min at RT, followed by incubation with Rockland's, Inc. Anti-Human BDNF. After washing, membrane was probed with secondary antibody Dylight™ 649 Conjugated Anti-Rabbit IgG (H&L) (Goat) Antibody (611-143-122) diluted 1:20,000 in blocking buffer (p/n MB-070) for 30 min. at RT. Data was collected using Bio-Rad VersaDoc® 4000 MP imaging system.

Anti-BDNF (RABBIT) Antibody - Background

BDNF is a member of the nerve growth factor family of trophic factors. In the brain BDNF has a trophic action on retinal, cholinergic, and dopaminergic neurons, and in the peripheral nervous system it acts on both motor and sensory neurons. Some protein domains of BDNF are identical with those of NGF and another neurotrophic factor, designated NT-3 (neurotrophin-3). It exists as monomers and homodimers, and binds to NTRK2/TRKB. Polyclonal antibodies raised against murine NGF have been shown to cross-react with both NT-3 and BDNF. The propeptide is N-glycosylated and glycosulfated. BDNF is converted into mature BDNF by plasmin (PLG). It is expressed in brain, and highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum; it is also expressed in heart, lung, skeletal muscle, testis, prostate and placenta.