

### KD-Validated Anti-Brain derived neurotrophic factor Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI2360

## **Specification**

## KD-Validated Anti-Brain derived neurotrophic factor Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession P23560

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 28 kDa , observed, 28 kDa KDa

Gene Name BD

Aliases BDNF; Brain Derived Neurotrophic Factor;

**Brain-Derived Neurotrophic Factor;** 

Immunogen Neurotrophin; Abrineurin; ANON2; BULN2
A synthesized peptide derived from human

**BDNF** 

## KD-Validated Anti-Brain derived neurotrophic factor Rabbit Monoclonal Antibody - Additional Information

Gene ID 627

Other Names

Neurotrophic factor BDNF precursor form, proBDNF, Abrineurin, Brain-derived neurotrophic factor, Neurotrophic factor BDNF, BDNF {ECO:0000303|PubMed:28397838,

ECO:0000312|HGNC:HGNC:1033}

# KD-Validated Anti-Brain derived neurotrophic factor Rabbit Monoclonal 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**

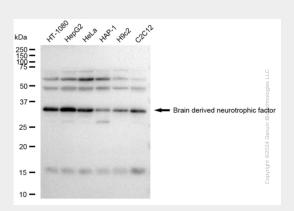
Detected in blood plasma and in saliva (at protein level) (PubMed:11152678, PubMed:19467646). Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta

# KD-Validated Anti-Brain derived neurotrophic factor Rabbit Monoclonal Antibody - Protocols

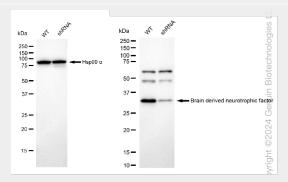
Provided below are standard protocols that you may find useful for product applications.

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

## KD-Validated Anti-Brain derived neurotrophic factor Rabbit Monoclonal Antibody - Images

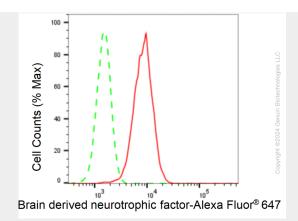


Western blotting analysis using anti-Brain derived neurotrophic factor antibody (Cat#AGI2360). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Brain derived neurotrophic factor antibody (Cat#AGI2360, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

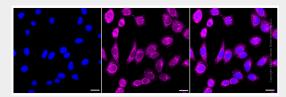


Western blotting analysis using anti-Brain derived neurotrophic factor antibody (Cat#AGI2360). Brain derived neurotrophic factor expression in wild type (WT) and Brain derived neurotrophic factor shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Brain derived neurotrophic factor antibody (Cat#AGI2360, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Flow cytometric analysis of Brain derived neurotrophic factor expression in HepG2 cells using Brain derived neurotrophic factor antibody (Cat#AGI2360, 1:2,000). Green, isotype control; red, Brain derived neurotrophic factor.



Immunocytochemical staining of HepG2 cells with Brain derived neurotrophic factor antibody (Cat#AGI2360, 1:1,000). Nuclei were stained blue with DAPI; Brain derived neurotrophic factor was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20  $\mu$ m.