

Rabbit BDNF Polyclonal Antibody | anti-BDNF antibody

BDNF Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326160	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

BDNF; Polyclonal Antibody; BDNF Antibody; Abrineurin; ANON2; BDNF_HUMAN; Brain Derived Neurotrophic Factor; Brain-derived neurotrophic factor; BULN2; MGC34632; Neurotrophin; anti-BDNF antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	BDNF antibody detects endogenous levels of total BDNF
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	247
Applicable Applications for anti-BDNF antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human BDNF
Subcellular Location	Secreted.
Tissue Specificity	Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts of SH-SY5Y, using BDNF antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA326160 staining A549 cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37 degree C. The primary antibody was diluted 1/200 and incubated with the sample for 1 hour at 37 degree C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary antibody.



IHC (Immunohistochemistry)

AAA326160 at 1/100 staining human brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-BDNF antibody	Description: 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. The cell surface receptors through which neurotrophins mediate their activity have been identified. For instance, the Trk A receptor is the preferential receptor for NGF, but also binds NT-3 and NT-4. The Trk B receptor binds both BDNF and NT-4 equally well, and binds NT-3 to a lesser extent, while the Trk C receptor only binds NT-3. Function: 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. Subunit Structure: Monomers and homodimers. Binds to NTRK2/TRKB. Post-translational Modifications: The propeptide is N-glycosylated and glycosulfated. Converted into mature BDNF by plasmin (PLG). Similarity: Belongs to the NGF-beta family.
References	Ge QD, Xie C, Zhang H, Tan Y, Wan CW, Wang WJ, Jin TX; Journal: Biol Trace Elem Res. Differential Expression of miRNAs in the Hippocampi of Offspring Rats Exposed to Fluorine Combined with Aluminum during the Embryonic Stage and into Adulthood. Qi-DiGe, YingTan, YuLuo, Wen-JuanWang, HuaZhang, ChunXie; Journal: ENVIRON TOXICOL PHAR. MiR-132, miR-204 and BDNF-TrkB signaling pathway may be involved in spatial learning and memory impairment of the offspring rats caused by fluorine and aluminum exposure during the embryonic stage and into adulthood.

NCBI AND UNIPROT INFORMATION

NCBI GI #	219842288
NCBI GeneID	627
NCBI Accession #	NP_001137277.1
NCBI GenBank Nucleotide #	NM_001143805.1
UniProt Accession #	P23560; Q598Q1; Q6DN19; Q6YNR2; Q6YNR3; Q9BYY7; Q9UC24; A7LA85; A7LA92; D3DQZ2

Molecular Weight	Observed: 28 kDa Predicted: 28 kDa
NCBI Official Full Name	brain-derived neurotrophic factor isoform a preproprotein
NCBI Official Synonym Full Names	brain derived neurotrophic factor
NCBI Official Symbol	BDNF
NCBI Official Synonym Symbols	ANON2; BULN2
NCBI Protein Information	brain-derived neurotrophic factor
UniProt Protein Name	Brain-derived neurotrophic factor
UniProt Gene Name	BDNF
UniProt Synonym Gene Names	BDNF

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 Online datasheet: <https://stage.aaabiotech.com/polyclonal/bdnf-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326160>