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BDNF Antibody

Rabbit mAb
Catalog # AP90277

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	P23560
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	BDNF;MGC34632;Abrineurin; ANON2; Brain Derived Neurotrophic Factor; Neurotrophin;BULN2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	27818

Additional Information

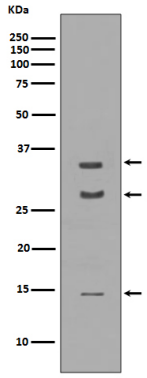
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human BDNF
Description	Neurotrophins function to regulate naturally occurring cell death of neurons during development. The prototype neurotrophin is nerve growth 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).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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

Images



Western blot analysis of extracts of Human cerebellum lysate, using BDNF antibody.

Image not found : 202311/AP90277-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human testis, using BDNF Antibody .

Image not found : 202311/AP90277-IF.jpg

Immunofluorescent analysis of HeLa cells, using BDNF Antibody.