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BDNF Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7979B

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P23560
Other Accession	P23363, P14082, P21237, Q95106
Reactivity	Human, Rat
Predicted	Mouse, Pig, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14839
Calculated MW	27818
Antigen Region	206-236

Additional Information

Gene ID	627
Other Names	Brain-derived neurotrophic factor, BDNF, Abrineurin, BDNF
Target/Specificity	This BDNF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 206-236 amino acids from the C-terminal region of human BDNF.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BDNF Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

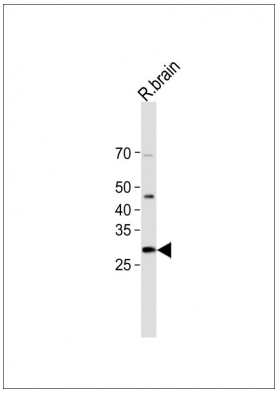
Background

BDNF is a member of the nerve growth factor family. It is induced by cortical neurons, and is necessary for survival of striatal neurons in the brain. Expression of this protein is reduced in both Alzheimer's and Huntington disease patients. This protein may play a role in the regulation of stress response and in the biology of mood disorders.

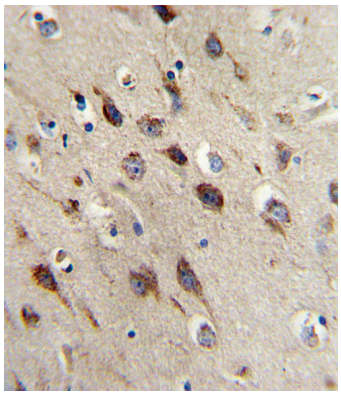
References

Jiang,H., Clin. Chim. Acta 400 (1-2), 3-7 (2009)
Liu,L., Psychiatr. Genet. 18 (6), 267-274 (2008)
Dmitrzak-Weglarz,M., Pharmacogenomics 9 (11), 1595-1603 (2008)

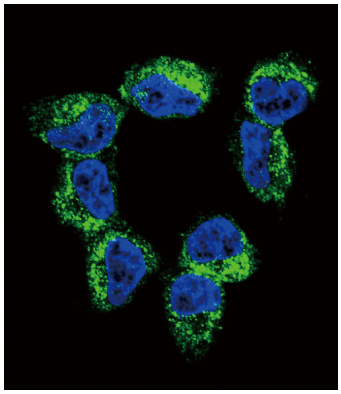
Images



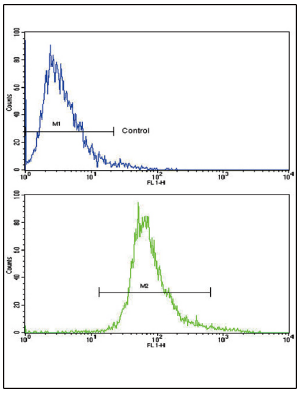
All lanes: Anti-BDNF Antibody (C-term) at 1:500 dilution + Rat brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 28 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain reacted with BDNF Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of BDNF Antibody (C-term)(Cat#AP7979b) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).



Flow cytometric analysis of CEM cells using BDNF Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Distribution of BDNF and TrkB isoforms in growing antler tissues of red deer.

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