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## BDNF Rabbit pAb

Catalog Number: bs-4989R

Target Protein: BDNF

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:50-200), IHC-F (1:50-200), IF (1:50-200)

Reactivity: Human, Mouse, Rat

Predicted MW: 13/27 kDa

Entrez Gene: 627

Swiss Prot: P23560

Source: KLH conjugated synthetic peptide derived from human BDNF: 151-247/247.

Purification: affinity purified by Protein A

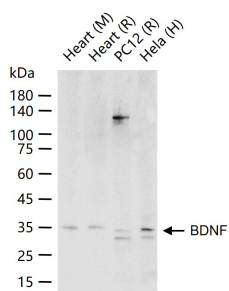
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

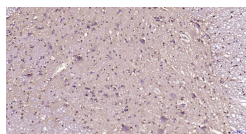
**Background:** Neurotrophins function to regulate naturally occurring cell death of neurons during development. The prototype neurotrophin is nerve growth factor (NGF), originally discovered in the 1950s as a soluble peptide promoting the survival of, and neurite outgrowth from, sympathetic ganglia. More recently, 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 Trk A receptor is the preferential receptor for NGF, but also binds NT-3 and NT-4. The Trk B receptor binds equally well to both BDNF and NT-4 and to a lesser extent NT-3, while the Trk C receptor only binds NT-3. BDNF promotes the survival of neuronal populations that are all located either in the central nervous system or directly connected to it. Belongs to the NGF-beta family.

### VALIDATION IMAGES

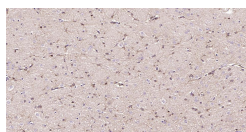
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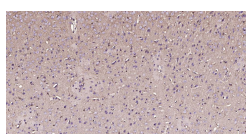
25 ug total protein per lane of various lysates (see on figure) probed with BDNF polyclonal antibody, unconjugated (bs-4989R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



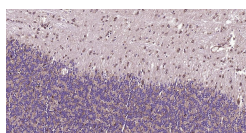
Paraformaldehyde-fixed, paraffin embedded Rat Spinal Cord; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with BDNF Polyclonal Antibody, Unconjugated (bs-4989R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



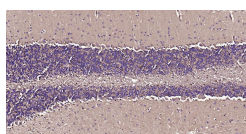
Paraformaldehyde-fixed, paraffin embedded Rat Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with BDNF Polyclonal Antibody, Unconjugated (bs-4989R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Mouse Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with BDNF Polyclonal Antibody, Unconjugated (bs-4989R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Rat Cerebellum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with BDNF Polyclonal Antibody, Unconjugated (bs-4989R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Mouse Cerebellum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with BDNF Polyclonal Antibody, Unconjugated (bs-4989R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=16.744] Xiaoyu Ma. et al. Multifunctional injectable hydrogel promotes functional recovery after stroke by modulating microglial polarization, angiogenesis and neuroplasticity. CHEM ENG J. 2023 May;464:142520 IF ; Mouse . 10.1016/j.cej.2023.142520

[IF=13.352] Tingting Ku. et al. Tebuconazole mediates cognitive impairment via the microbe-gut-brain axis (MGBA) in mice. ENVIRON INT. 2023 Feb;;107821 WB ; Mouse . 36827814

[IF=9.584] Liu Sumei. et al. Suppression of TGFβR-Smad3 pathway alleviates the syrinx induced by syringomyelia. CELL BIOSCI. 2023 Dec;13(1):1-13 IF ; Rat . 37248485

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

[IF=7.59] Yuanxin Zhai. et al. High-efficiency Brain-targeted Intranasal Delivery of BDNF Mediated by Engineered Exosomes to Promote Remyelination. BIOMATER SCI-UK. 2022 Aug;; IF ; Mouse . 36039673

[IF=6.706] Pallavi Gurung. et al. Euonymus alatus Twig Extract Protects against Scopolamine-Induced Changes in Brain and Brain-Derived Cells via Cholinergic and BDNF Pathways. NUTRIENTS. 2023 Jan;15(1):128 WB ; Mouse, Rat . 36615789