

**Goat Anti-BDNF Antibody (internal region)**  
**Purified Goat Polyclonal Antibody**  
**Catalog # AF4155a**

**Specification**

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**Goat Anti-BDNF Antibody (internal region) - Product Information**

Application	IF, IHC-P
Primary Accession	<a href="#">P23560</a>
Other Accession	<a href="#">NP_001700.2</a> , <a href="#">NP_001700.2</a> , <a href="#">NP_733928.1</a> , <a href="#">NP_733929.1</a> , <a href="#">NP_733930.1</a> , <a href="#">NP_733931.1</a>
Reactivity	Human, Mouse, Rat
Predicted	Human, Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5
Calculated MW	27818

**Goat Anti-BDNF Antibody (internal region) - Additional Information**

**Gene ID** 627

**Other Names**

BDNF ; brain-derived neurotrophic factor; MGC34632; neurotrophin

**Format**

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

**Immunogen**

Peptide with sequence ETKCNPMGYTKE, from the internal region of the protein sequence according to [NP\\_001700.2](#); [NP\\_001700.2](#); [NP\\_733928.1](#); [NP\\_733929.1](#); [NP\\_733930.1](#); [NP\\_733931.1](#).

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-BDNF Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-BDNF Antibody (internal region) - 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

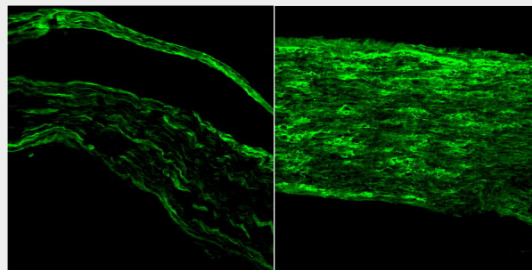
Detected in blood plasma and in saliva (at protein level) (PubMed:11152678, PubMed:19467646). Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta

### Goat Anti-BDNF Antibody (internal region) - Protocols

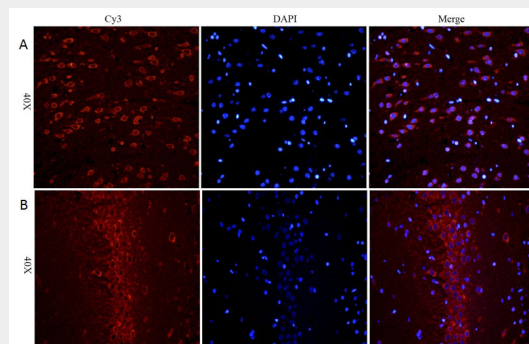
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

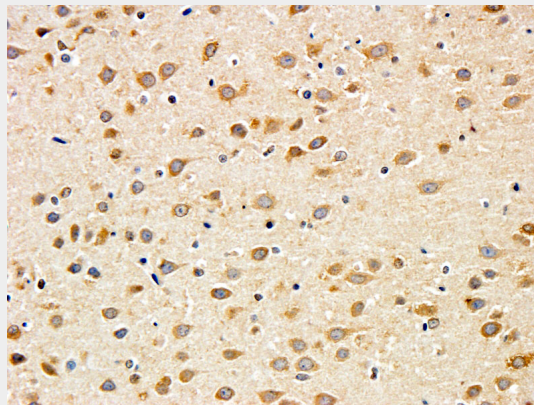
### Goat Anti-BDNF Antibody (internal region) - Images



AF4155a (1  $\mu$ g/ml) staining of PFA-perfused cryosection of Mouse sciatic nerve (left) and injured sciatic nerve (right). Alexa 488-staining. Data obtained from Simon Glerup, Department of Biomedicine Aarhus University, Denmark.



AF4155a (5ug/ml) staining of paraffin embedded Rat Cerebral Cortex (A) and Rat Hippocampus (B), CRY-staining with DAPI nuclear counter stain in blue. Antigen retrieval with citrate buffer pH 6 at 95-98C.



AF4155a (5ug/ml) staining of paraffin embedded Rat Cerebral Cortex. Antigen retrieval with citrate buffer pH 6 at 95-98C, DAB-staining.

#### **Goat Anti-BDNF Antibody (internal region) - References**

BDNF induces transport of PSD-95 to dendrites through PI3K-AKT signaling after NMDA receptor activation. Yoshii A, Constantine-Paton M. Nat Neurosci. 2007 Jun;10(6):702-711. Epub 2007 May 21.