

Rabbit antibody to BDNF (129-138): affinity purified

Catalogue No.:	R-172-20
Description:	THIS PRODUCT HAS BEEN SUPERCEDED. PLEASE REFER TO THE "REPLACED BY" FIELD BELOW TO LOCATE THE CURRENT BIOSENSIS PRODUCT TO MEET YOUR RESEARCH NEEDS. BDNF belongs to the neurotrophin family and promotes the survival of neuronal populations that are all located either in the central nervous system or directly connected to it. It is a 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. The alterations in BDNF expression induced by various kinds of brain insult including stress, ischemia, seizure activity and hypoglycemia, may contribute to some pathologies such as depression, epilepsy, Alzheimer's, and Parkinson's disease. Microglia release BDNF that may contribute to neuroinflammation and neuropathic pain. SUBUNIT: Monomers and homodimers. Binds to NTRK2/TRKB. SUBCELLULAR LOCATION: Secreted protein. POst translation modification: Converted into mature BDNF by plasmin (PLG). SIMILARITY: Belongs to the NGF-beta family.
Replaced by:	Mouse monoclonal antibody to rhBDNF, Clone 4C8, IgG, cat# M-1744-50/100 Rabbit polyclonal antibody to rhBDNF, affinity-purified, cat# R-1707-100 Rabbit polyclonal antibody to rhBDNF, whole serum, cat# R-088-100 Rabbit polyclonal antibody to rhBDNF, IgG, cat# R-017-500 Rabbit polyclonal antibody to BDNF (129-138), whole serum, cat# R-083-100 Rabbit polyclonal antibody to BDNF (129-138), IgG, cat# R-066-100
Batch No.:	See product label
Unit size:	20 µg
Antigen:	A synthetic peptide (HSDPARRGEL) as a part of human BDNF protein (aa: 129-138) conjugated to KLH has been used as the immunogen. The BDNF protein sequence is highly conserved amongst many mammalian species.
Other Names:	Brain-derived neurotrophic factor; Abrineurin; proBDNF;
Accession:	BDNF_HUMAN
Produced in:	Rabbit
Purity:	Affinity purified
Applications:	IHC, ELISA. A working concentration of 1-10 µg/ml is recommended for IHC and ELISA. We suggest R-083-100 or R-084-100 for western blotting applications. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	Less than 0.1% cross reactivity with mouse NGF, recombinant human NT3 and NT4/5 has been recorded by dot blot analysis. This antiserum also easily recognises recombinant human BDNF in western blot.
Cross-reactivity:	This antiserum is known to recognise rat, mouse and human BDNF.
Form:	Lyophilised

FOR RESEARCH USE ONLY

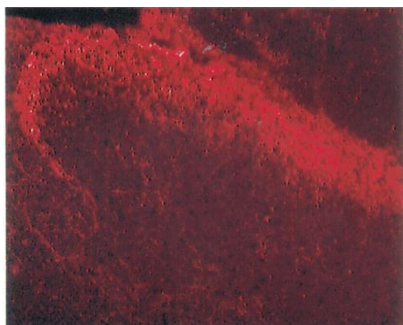
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- Reconstitution:** Reconstitute in 20 µl of sterile water. Centrifuge to remove any insoluble material.
- Storage:** After reconstitution keep aliquots at -20°C for a higher stability, and at 4°C with an appropriate antibacterial agent. Glycerol (1:) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
- Expiry Date:** 12 months after purchase
- Specific References:**

Moses, C et al. (2015) The Acquisition of Target Dependence by Developing Rat Retinal Ganglion Cells. *eNeuro*:2 (3) Species: Rat. RDG cell cultures; Application: ICC/IF; 4% PFA fixed, 0.2% triton treated.

References:

1. A Acheson et al (1995) *Nat.* 74: 450-3
2. Q Yan et al (1994) *J. Neurosci.* 14(9): 5281-91
3. XF Zhou et al (1996) *Neurosci.* 74: 945-53
4. XF Zhou, et al (1998) *Exp. Neurol.* 149: 237-42
5. B Mellstrom et al (2004) *Crit Rev Neurobiol* 16, 43-9
6. I Tapia-Arancibia et al (2004) *Front Neuroendocrinol* 25, 77-107
7. S Pezet, et al (2002) *Brain Res Brain Res Rev* 40, 240-9
8. Barde Y. A. et al (1989) *EMBO J.* 1: 549
9. Conner J et al. (1997) *J. Neurosci.* 17: 2295
10. JA Coull et al (2005) *Nature.* Dec 15;438(7070):1017-21.
11. C Gomes et al (2013) *J Neuroinflammation.* Jan 30;10:16.



The rat spinal cord section was stained with Rabbit antibody to BDNF (129-138): affinity purified (R-172-20), at a concentration of 2 µg/ml. Nerve terminals in the dorsal horn are labelled. Secondary detection with CY3 labelled antibodies. (Image courtesy of KJ Wong).

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