

Rabbit antibody to proBDNF (69-82): affinity purified

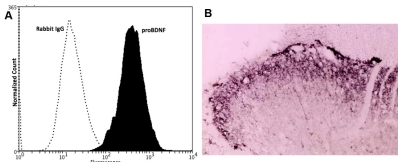
Catalogue No.:	R-176-20
Description:	BDNF belongs to the neurotrophin family and promotes the survival of neuronal populations that are all located either in the central nervous system or directly connected to it. It is a major regulator of synaptic transmission and plasticity at adult synapses in many 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.
Batch No.:	See product label
Unit size:	20 ug
Antigen:	A synthetic peptide (C-ELLDEDQKVRPNEE) as a part of human BDNF precursor protein (aa: 69-82) conjugated to KLH has been used as the immunogen.
Other Names:	Brain-derived neurotrophic factor (Precursor); Abrineurin
Accession:	BDNF_HUMAN
Produced in:	Rabbit
Purity:	Affinity purified
Applications:	IHC, WB. 1-5 ug/mL is recommended for both applications, Flow Cytometry (2ug/10 ⁶ cells). Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Comments:	Ready-to-use reagents for in-vitro laboratory research use only.
Specificity:	Used in western blot, this antiserum detects a 35 kDa band corresponding to the molecular weight of proBDNF. No cross reactivity with other proneurotrophins was detected.
Cross-reactivity:	This antibody is known to react with human, mouse and rat proBDNF and also expected to recognise other mammalian proBDNF.
Form:	Lyophilised
Reconstitution:	Reconstitute in 20 uL of sterile water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution keep aliquots at -20C for a higher stability, and at 2-8C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
Expiry Date:	12 months after purchase
Specific References:	1. Macias M. et al (2007) Locomotor exercise alters expression of pro-brain-derived neurotrophic factor, brain-derived neurotrophic factor and its receptor TrkB in the spinal cord of adult rats. Eur J Neurosci. 2007 Apr;25(8):2425-44.

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References:

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8. Barde Y. A. et al (1989) EMBO J. 1: 549
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A: Specific staining of proBDNF expressed in human neuroblastoma SH-SY5Y cell line by Flow Cytometry using cat # R-176-20. Fixing and Permeabilization of cells: Absolute methanol (10 minutes in ice) and 0.1% Tween-20 in PBS, Blocking: 15% Horse serum, Primary antibody: Rabbit Polyclonal antibody to proBDNF (0.5 μ g per $\sim 10^6$ cells) for 30 minutes at room temperature, Secondary antibody: Donkey anti-rabbit PE labeled secondary antibody (1:100 dilution) with incubation for 20 minutes in dark at room temperature. Negative Control: Normal Rabbit IgG (black dashed). Data and results were generated using Orflo MoxiflowTM instrument and protocols. B: Pro-BDNF staining within the rat spinal cord dorsal horn. Normal cryostat sections of adult rat cord were stained with recombinant human anti-proBDNF (R-176-20) and detected with HRP labelled anti-rabbit antibody. Dilution 1:2000 in Human mouse and rat (Image courtesy of Dr Xin-fu Zhou).

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