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PRODUCT DATASHEET

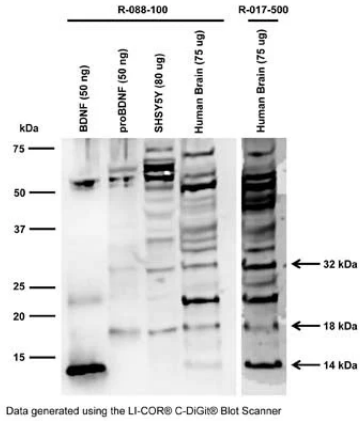
Anti-Brain-derived neurotrophic factor (BDNF) Antibody

Product Details

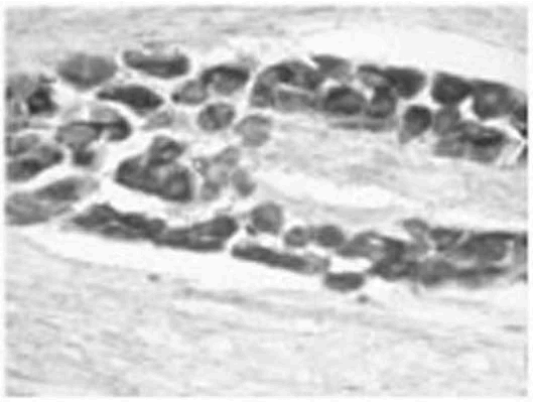
Available Variants	500 µg (SKU:R-017-500)
Conjugate	Unconjugated
Isotype	IgG
Host Species	Rabbit
Format	IgG
Physical State	Lyophilized
Buffer	Lyophilized from a solution containing PBS pH 7.4
Production Notes	Protein G purified IgG
Applications	ELISA, IHC, Neutralize, WB
Dilution Ranges	WB: 1-10 µg/mL IHC: 1-10 µg/mL ELISA: 0.1 µg/mL
Species Reactivity	Human, Mouse, Rat
Immunogen	Recombinant human BDNF
Specificity	Less than 0.1% cross-reactivity against NGF, recombinant NT3 and NT4 by dot blot. This antiserum is known to react with BDNF from rat, mouse and human. Expected to react with BDNF of other species due to amino acid sequence homology.
Molecular Weight	14, 18, 32 kDa (see application details)
Storage	Spin vial briefly before opening. Reconstitute in 500 µL sterile-filtered 1X PBS, pH 7.2-7.6. Centrifuge to remove any insoluble material. After reconstitution keep aliquots at -20°C for a higher stability, and at 2-8°C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.

UniProt ID	P23560 UniProt Summary: Important signaling molecule that activates signaling cascades downstream of NTRK2. 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.
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	627

Product Images



Western blot analysis of BDNF expression in SH-SY5Y cell lysate (RIPA) and human brain. Polyclonal rabbit antibodies to rhBDNF R-088-100 (whole serum, 1:1000) and R-017-500 (IgG, 10 µg/mL) detect monomeric BDNF at 14 kDa in human brain (Tris-homogenate). ProBDNF is detected at the expected molecular weight of 32 kDa for glycosylated proBDNF monomer. A 18 kDa BDNF-isoform is shown that has previously been detected with other BDNF antibodies (Tongiorgi *et al.*, 2012; Silhol *et al.*, 2007). This 18 kDa band is also visible in the proBDNF protein sample, Lane 2. Western Blotting Method: SDS-PAGE: denaturing and reducing, 12% Bis-Tris gel; Transfer: Tris-Glycine buffer, semi-dry transfer; Membrane: nitrocellulose (0.22 µm); Blocking: 5% skim milk in TBST, 1 hour at RT; Primary antibody: overnight at 4°C; Secondary antibody: anti-rabbit-HRP (1/6000), 2 hours at RT; Detection: Chemiluminiscence.



Immunohistochemical staining for BDNF in rat dorsal root ganglion (DRG) using Rabbit antibody to rh BDNF: IgG (R-017-500) at an amount of 5 µg/mL. Neuron cell bodies are strongly stained for BDNF.
