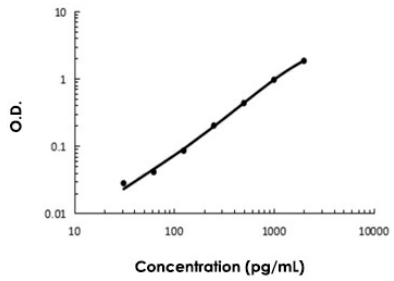
Bdnf (Mouse) ELISA Kit

Catalog # KA0331 Size 1 Kit

Applications



The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

Specification

Product Description	Bdnf (Mouse) ELISA Kit is a sandwich enzyme immunoassay for the quantitative measurement of mouse Bdnf.
Suitable Sample	Cell Culture Supernatant, Cell Lysates, Plasma (Citrate, EDTA, Heparin), Serum
Sample Volume	100 uL
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	31.2 to 2000 pg/mL
Reactivity	Mouse
Regulation Status	For research use only (RUO)
Quality Control Testing	Standard curve The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.
Storage Instruction	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles.

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Applications

- Quantification

Gene Info — Bdnf

Entrez GeneID	12064
Gene Name	Bdnf
Gene Alias	-
Gene Description	brain derived neurotrophic factor
Gene Ontology	Hyperlink
Other Designations	OTTMUSP00000016087|OTTMUSP00000016088|OTTMUSP00000016089|OTTMUSP00000016090|OTTMUSP00000016091|OTTMUSP00000016092|OTTMUSP00000016093|OTTMUSP00000016094|OTTMUSP00000016095|OTTMUSP00000016096|anorexia BDNF|brain-derived neurotrophic factor

Publication Reference

- Neurobiology of co-morbid stress and a western diet in mice: mitochondrial, proteomic and behavioral outcomes.

  Tessa Helman, Makayla Nicholas, Brock Lyon, Saba Naghipour, Chul-Kyu Kim, Trissha Ybanez, Kai Robertson, Tia A Griffith, Jason N Peart, Nicolas J C Stapelberg, John P Headrick, Eugene F Du Toit.

  Metabolic Brain Disease 2026 Apr; 41(1):94.

  Application: ELISA, Quant, Mice, Blood

- Design, Synthesis, Biological Evaluation, and Computational Studies of Novel 1,4-Diketopiperazines as GABA Agonist.

  Mostafa Abd El-Mohsen Anwar., Eman R Mohammed., Samir M El Moghazy., Nesma M E Abo El Nasr., Marawan A Elbaset., Reda M S Korany., Omar Ahmed-Farid., Ibrahim M Ibrahim., Walaa Hamada Abd-Allah.

  Drug development research 2025 Aug; 86(5):e70136.

- Recycling of endocytic BDNF through extracellular vesicles in astrocytes.

  Jeongho Han., Hyungju Park.

  Scientific reports 2025 Jan; 15(1):2011.

  Application: ELISA, Mouse, Astrocyte-conditioned media (ACM)

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- Knockdown of thioredoxin interacting protein in Müller cells attenuates photoreceptor apoptosis in streptozotocin-induced diabetic mouse model.

  Na Li, Shuang Gao, Sha Gao, Yanuo Wang, Hanwen Huang, Jing Wang, Xi Shen.

  International journal of biological macromolecules 2024 Jun; 271(Pt 2):132731.

  Application: Quant, Mouse, Müller cells

- Enhanced Nerve Regeneration by Exosomes Secreted by Adipose-Derived Stem Cells with or without FK506 Stimulation.

  Cheng-Shyuan Rau, Pao-Jen Kuo, Shao-Chun Wu, Lien-Hung Huang, Tsu-Hsiang Lu, Yi-Chan Wu, Chia-Jung Wu, Chia-Wei Lin, Chia-Wen Tsai, Ching-Hua Hsieh

  Int J Mol Sci 2021 Aug; 22(16):0.

- Palmitoylethanolamide Modulation of Microglia Activation: Characterization of Mechanisms of Action and Implication for Its Neuroprotective Effects.

  Alessia D'Aloia, Laura Molteni, Francesca Gullo, Elena Bresciani, Valentina Artusa, Laura Rizzi, Michela Ceriani, Ramona Meanti, Marzia Lecchi, Silvia Coco, Barbara Costa, Antonio Torsello.

  International Journal of Molecular Sciences 2021 Mar; 22(6):3054.

  Application: Quant, Mouse, Mouse primary cortical cultures, N9 cells

- Glycogen synthase kinase-3 inhibition rescues sex-dependent contextual fear memory deficit in HIV-1 transgenic mice.

  Shamsudheen Moidunny, Michael A Benneyworth, David J Titus, Eleonore Beurel, Udhghatri Kolli, Joyce Meints, Richa Jalodia, Sundaram Ramakrishnan, Coleen M Atkins, Sabita Roy.

  British Journal of Pharmacology 2020 Dec; 177(24):5658.

  Application: Quant, Mouse, Mouse hippocampus

- Hesperidin alleviates chronic restraint stress and lipopolysaccharide-induced Hippocampus and Frontal cortex damage in mice: Role of TLR4/NF-κB, p38 MAPK/JNK, Nrf2/ARE signaling.

  Mohit Kwatra, Sahabuddin Ahmed, Basveshwar Gawali, Samir Ranjan Panda, V G M Naidu.

  Neurochemistry International 2020 Nov; 140:104835.

  Application: Quant, Mouse, Mouse frontal cortex, Mouse hippocampus, Mouse serum

- Phosphodiesterase 10A Inhibition Leads to Brain Region-Specific Recovery Based on Stroke Type.

  Shirin Z Birjandi, Nora Abduljawad, Shyama Nair, Morteza Dehghani, Kazunori Suzuki, Haruhide Kimura, S Thomas Carmichael.

  Translational Stroke Research 2021 Apr; 12(2):303.

  Application: ELISA, Mouse, Brain stroke extracted

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- Motor function deficits in the estrogen receptor beta knockout mouse: Role on excitatory neurotransmission and myelination in the motor cortex.

  Mukesh Kumar Varshney, Nancy Yiu-Lin Yu, Shintaro Katayama, Xin Li, Tianyao Liu, Wan-Fu Wu, Virpi Töhönen, Kaarel Krjutškov, Juha Kere, Xiaotang Fan, José Inzunza, Jan-Åke Gustafsson, Ivan Nalvarte.

  Neuroendocrinology 2021 Jan; 111(1-2):27.

  Application: Quant, Mouse, Mouse cortical pieces

- Activation of TrkB/Akt signaling by a TrkB receptor agonist improves long-term histological and functional outcomes in experimental intracerebral hemorrhage.

  Wu CH, Chen CC, Hung TH, Chuang YC, Chao M, Shyue SK, Chen SF.

  Journal of Biomedical Science 2019 Jul; 26(1):53.

  Application: Quant, Mouse, Mouse brains

- Acute and Chronic Exposure of Toluene Induces Genotoxicity in Different Regions of the Brain in Normal and Allergic Mouse Models.

  Laio TY, Chen CC, Tsou HH, Liu TY, Wang HT.

  Neurotoxicity Research 2019 Nov; 36(4):669.

  Application: Quant, Mouse, Mouse hippocampus

- Effect of a high sucrose and high fat diet in BDNF (+/-) mice on oxidative stress markers in adipose tissues.

  Bodur A, İnce İ, Kahraman C, Abidin İ, Aydin-Abidin S, Alver A.

  Archives of Biochemistry and Biophysics 2019 Feb; 665:46.

  Application: Quant, Mouse, Mouse serum

- Modulation of AMPA receptor surface diffusion restores hippocampal plasticity and memory in Huntington's disease models.

  Zhang H, Zhang C, Vincent J, Zala D, Benstaali C, Sainlos M, Grillo-Bosch D, Daburon S, Coussen F, Cho Y, David DJ, Saudou F, Humeau Y, Choquet D.

  Nature Communications 2018 Oct; 9(1):4272.

  Application: Quant, Mouse, Mouse hippocampus

- Behavioral abnormalities with disruption of brain structure in mice overexpressing VGF.

  Takahiro Mizoguchi, Hiroko Minakuchi, Mitsue Ishisaka, Kazuhiro Tsuruma, Masamitsu Shimazawa, Hideaki Hara

  Sci Rep 2017 Jul; 7(1):4691.

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- Nano-particle delivery of brain derived neurotrophic factor after focal cerebral ischemia reduces tissue injury and enhances behavioral recovery.

  Harris NM, Ritzel R, Mancini N, Jiang Y, Yi X, Manickam DS, Banks WA, Kabanov AV, McCullough LD, Verma R.

  Pharmacology, Biochemistry, and Behavior 2016 Sep; 150-151:48.

  Application: Quan, Mouse, Mouse serum and brain tissues

- Effects of exercise in a relapsing-remitting model of experimental autoimmune encephalomyelitis.

  Klaren RE, Stasula U, Steelman AJ, Hernandez J, Pence BD, Woods JA, Motl RW.

  Journal of Neuroscience Research 2016 Oct; 94(10):907.

  Application: Quant, Mouse, Mouse hippocampus

- Tackling Glaucoma from within the Brain: An Unfortunate Interplay of BDNF and TrkB.

  Dekeyster E, Geeraerts E, Buyens T, Van den Haute C, Baekelandt V, De Groef L, Salinas-Navarro M, Moons L.

  PLoS One 2015 Nov; 10(11):e0142067.

  Application: ELISA, Mouse, Retina, superior colliculus

- Rapid trimming of cell surface polySia by exovesicular sialidase triggers release of preexisting surface neurotrophin.

  Sumida M, Hane M, Yabe U, Shimoda Y, Pearce OM, Kiso M, Miyagi T, Sawada M, Varki A, Kitajima K, Sato C.

  The Journal of Biological Chemistry 2015 May; 290(21):13202.

  Application: S-ELISA, Mouse, Ra2 cells culture medium

- Post-Injury Treatment with 7,8-Dihydroxyflavone, a TrkB Receptor Agonist, Protects against Experimental Traumatic Brain Injury via PI3K/Akt Signaling.

  Wu CH, Hung TH, Chen CC, Ke CH, Lee CY, Wang PY, Chen SF.

  PLoS One 2014 Nov; 9(11):e113397.

  Application: ELISA, Mouse, Protein extracted from cortex

- Haploinsufficiency of the autism candidate gene Neurobeachin induces autism-like behaviors and affects cellular and molecular processes of synaptic plasticity in mice.

  Nuytens K, Gantois I, Stijnen P, Iscru E, Laeremans A, Serneels L, Van Eylen L, Liebhaber SA, Devriendt K, Balschun D, Arckens L, Creemers JW, D'Hooge R.

  Neurobiology of Disease 2013 Mar; 51:144.

  Application: ELISA, Mouse, Hippocampi extracted

- Postsynaptic Induction of BDNF-Mediated Long-Term Potentiation.

  Kovalchuk Y, Hanse E, Kafitz KW, Konnerth A.

  Science 2002 Mar; 295(5560):1729.

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- Brain-derived neurotrophic factor-deficient mice develop aggressiveness and hyperphagia in conjunction with brain serotonergic abnormalities.

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- Molecular cloning of a human gene that is a member of the nerve growth factor family.

  Jones KR, Reichardt LF.

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