

Datasheet for ABIN5510518

BDNF ELISA Kit

1 Image

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Overview

Quantity:	96 tests
Target:	BDNF
Binding Specificity:	AA 129-247
Reactivity:	Cow
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Bovine BDNF
Brand:	PicoKine™
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Expression system for standard: sf21 Immunogen sequence: H129-R247
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Characteristics:	Sequence similarities: Belongs to the NGF-beta family. Tissue Specificity: Brain. Highly expressed in hippocampus, amygdala, cerebral cortex and cerebellum. Also expressed in heart, lung, skeletal muscle, testis, prostate and placenta. .

Target Details

Target:	BDNF
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Target Details

Alternative Name: BDNF ([BDNF Products](#))

Background: Protein Function: 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. .

Background: Brain-derived neurotrophic factor(BDNF) is a prosurvival factor induced by cortical neurons that is necessary for survival of striatal neurons in the brain. It is a secreted protein with the molecular weight of 27.8 kDa, consisting of 247 amino acids. It is known to promote neuronal survival and differentiation. BDNF shares substantial amino acid sequence identity with nerve growth factor(NGF). BDNF and neurotrophin-3(NT-3) are two recently cloned neurotrophic factors that are homologous to NGF. mRNA products of the BDNF and NT-3 genes are detected in the adult Bovine brain, suggesting that these proteins are involved in the maintenance of the adult nervous system. BDNF and other neurotrophins are critically involved in long-term potentiation(LTP). BDNF-mediated LTP is induced postsynaptically. BDNF has trophic effects on serotonergic(5-HT) neurons in the central nervous system. BDNF has an essential maintenance function in the regulation of anxiety-related behavior and in food intake through central mediators in both the basal and fasted state. It plays a role in treating breathing disorders such as respiratory insufficiency after spinal injury. The mature form of BDNF is identical in all mammals examined, and the gene encoding Bovine BDNF to chromosome 11, band p13.

Synonyms: Brain-derived neurotrophic factor,BDNF,Abrineurin,BDNF,

Full Gene Name: Brain-derived neurotrophic factor

Cellular Localisation: Secreted.

UniProt: [P23560](#)

Pathways: [RTK Signaling](#), [Synaptic Membrane](#), [Feeding Behaviour](#), [Dicarboxylic Acid Transport](#), [Regulation of long-term Neuronal Synaptic Plasticity](#)

Application Details

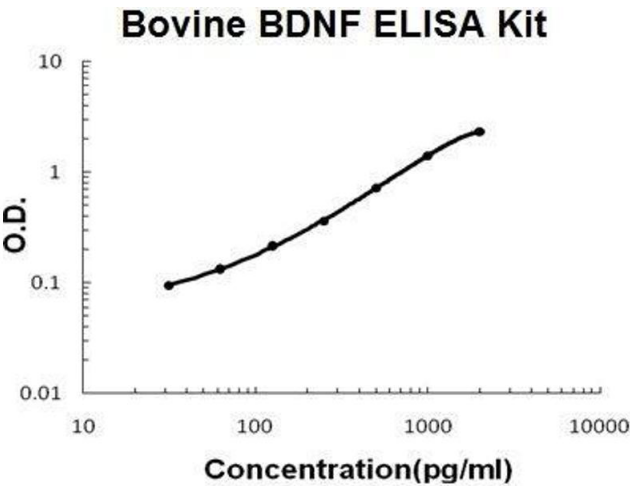
Plate: Pre-coated

Restrictions: For Research Use only

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store at 4 °C for 6 months, at -20 °C for 12 months. Avoid multiple freeze-thaw cycles(Shipped with wet ice.)
Expiry Date:	12 months

Images



ELISA

Image 1. Bovine BDNF PicoKine ELISA Kit standard curve