

Datasheet for ABIN6719745

BDNF ELISA Kit





Overview

| Quantity: | 1 kit |
|--------------------------|-------------------------|
| Target: | BDNF |
| Reactivity: | Mouse |
| Method Type: | Sandwich ELISA |
| Detection Range: | 31.2 pg/mL - 2000 pg/mL |
| Minimum Detection Limit: | 31.2 pg/mL |
| Application: | ELISA |

Product Details

| Purpose: | Sandwich ELISA for Quantitative Detection of Antigen |
|--------------------|---|
| Sample Type: | Cell Culture Supernatant, Plasma (EDTA - heparin - citrate), Serum |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Characteristics: | Synonyms: Abrineurin, ANON2, Brain derived neurotrophic factor, BULN2, MGC34632, Neurotrophin |

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 human 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 human BDNF to chromosome 11, band p13.

Gene Name: BDNF

Production: Natural and recombinant mouse BDNF. There is no detectable cross-reactivity with other relevant proteins.

Standard: Expression system for standard: sf21, Immunogen sequence: H129-R249

Target Details

| Target: | BDNF |
|-------------------|--|
| Alternative Name: | BDNF (BDNF Products) |
| Gene ID: | 12064 |
| NCBI Accession: | NP_001041604 |
| UniProt: | P21237 |
| Pathways: | RTK Signaling, Synaptic Membrane, Feeding Behaviour, Dicarboxylic Acid Transport, Regulation of long-term Neuronal Synaptic Plasticity |

Application Details

Application Notes:

Application Note: Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1 mL per well of the 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL mouse BDNF standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA, citrate) to each empty well. It is recommended that each mouse BDNF standard solution and each sample be measured in duplicate.

Blood Product Anticoagulant: Potassium EDTA

ELISA Dilution: 31.2 pg/mL-2000 pg/mL

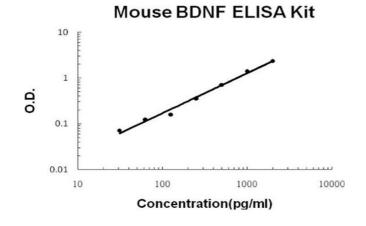
Application Details

| | Other Performance Data: DOE: 2-8° C - 04/12/19 -20° C - 10/12/19 |
|----------------|--|
| Sample Volume: | 100 μL |
| Plate: | Pre-coated |
| Restrictions: | For Research Use only |

Handling

| Storage: | RT,4 °C,-20 °C |
|------------------|---|
| Storage Comment: | Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at |
| | room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only |
| | prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid |
| | cycles of freezing and thawing. |

Images



ELISA

Image 1. Mouse BDNF Accusignal ELISA Kit Mouse BDNF AccuSignal ELISA Kit standard curve. Assay Range: 31.2pg/ml-2000pg/ml. Sensitivity: <2pg/ml.