

Datasheet for KOA0147**Rat BDNF ELISA Kit****Overview**

Description:	Rat BDNF AccuSignal ELISA Kit - KOA0147
Item No.:	KOA0147
Size:	1 Kit
Applications:	ELISA
Reactivity:	Rat
Range:	31.2 pg/ml - 2000 pg/ml

Product Details

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 27.8kDa, 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.
Synonyms:	Abrineurin, ANON2, Brain derived neurotrophic factor, BULN2, MGC34632, Neurotrophin
Detection Kit Type:	ELISA Kit
Detection Range:	31.2 pg/ml - 2000 pg/ml
Sensitivity:	<15 pg/ml

Target Details

Gene Name:	BDNF
Reactivity:	Rat

Immunogen:	Expression system for standard: sf21; Immunogen sequence: H129-R247
Purity/Specificity:	Natural and recombinant rat BDNF. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P23363 • NCBI - NP_001257559.1 • GenelD - 24225 • KOA0147 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 4000pg/ml, 2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml rat BDNF standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates, serum or plasma (heparin, EDTA, citrate) to each empty well. It is recommended that each rat BDNF standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Formulation

Anticoagulant:	Potassium EDTA
-----------------------	----------------

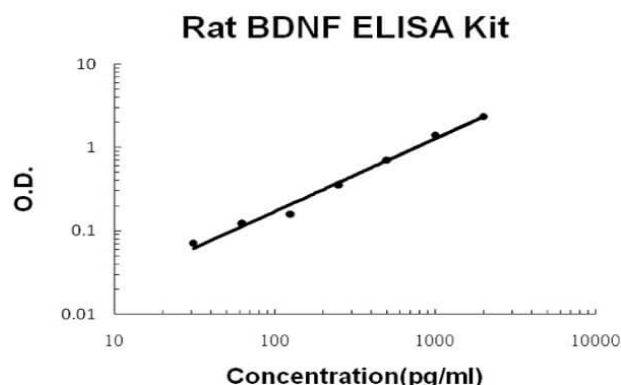
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	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.
Expiration:	See kit insert for complete instructions.

Images

ELISA

Rat BDNF AccuSignal ELISA Kit standard curve. Assay Range:
31.2pg/ml-2000pg/ml. Sensitivity: <2pg/ml.

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.