Rat Brain derived neurotrophic facor,BDNF ELISA Kit

Product Code	CSB-E04504r
Abbreviation	BDNF
Target Name	brain-derived neurotrophic factor
Uniprot No.	P23363
Alias	MGC34632, neurotrophin
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cardiovascular
Gene Names	Bdnf
Tag Info	quantitative
Protein Description	Sandwich

Description

The Rat Brain-derived neurotrophic factor (BDNF) ELISA Kit is a reliable and accurate tool for the quantification of BDNF in rat serum, plasma, and tissue homogenates. BDNF is a protein that plays a crucial role in the development and maintenance of the nervous system, particularly in the brain. This ELISA kit detects BDNF with high sensitivity, with a detection range of 0.312 ng/mL to 20 ng/mL and a sensitivity of 0.078 ng/mL.

The assay principle is a sandwich measurement, providing quantitative results that can be obtained in as little as 1-5 hours. The kit is optimized for use with a sample volume of 50-100ul, making it a cost-effective and efficient solution for researchers.

This ELISA kit is ideal for researchers investigating cardiovascular diseases, as BDNF has been implicated in the pathophysiology of these conditions. Additionally, our kit has been widely cited in scientific literature, with over 19 publications referencing its use.

Target Details

This protein is a member of the nerve growth factor family. It is induced by cortical neurons, and is necessary for survival of striatal neurons in the brain. Expression of this gene is reduced in both Alzheimer s and Huntington disease patients. This gene may play a role in the regulation of stress response and in the biology of mood disorders. Multiple transcript variants encoding distinct isoforms have been described for this gene.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat BDNF in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	105
	Range %	100-110
1:2	Average %	96
	Range %	90-102
1:4	Average %	92
	Range %	87-99
1:8	Average %	96
	Range %	91-104

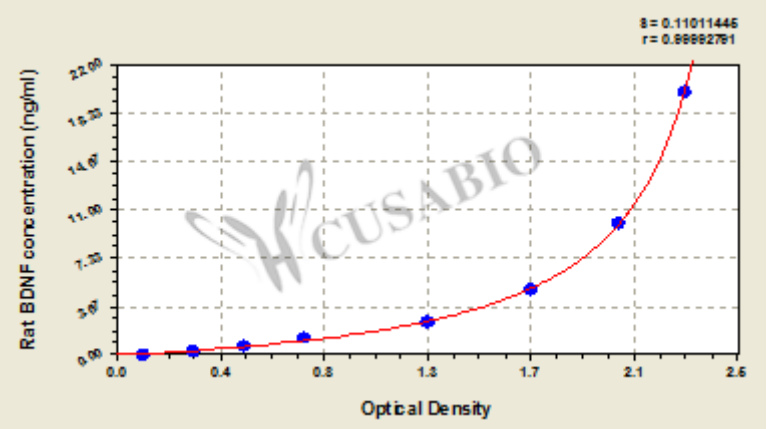
Recovery

The recovery of rat BDNF spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	96	90-102
EDTA plasma (n=4)	98	93-104

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
20	2.256	2.299	2.278	2.164
10	2.021	2.013	2.017	1.903
5	1.657	1.674	1.666	1.552
2.5	1.243	1.267	1.255	1.141
1.25	0.751	0.764	0.758	0.644
0.625	0.502	0.529	0.516	0.402
0.312	0.312	0.321	0.317	0.203
0	0.113	0.115	0.114	?

Msds

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