Datasheet for ABIN1672723
CNTF ELISA Kit

1 Image   **1** Publication

Overview

Quantity:	96 tests
Target:	CNTF
Binding Specificity:	AA 2-200
Reactivity:	Rat
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Rat CNTF
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Plasma (citrate)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: A2-M200
Specificity:	Expression system for standard: E.coli Immunogen sequence: A2-M200
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

Target:	CNTF
Alternative Name:	CNTF (CNTF Products)
Background:	Protein Function: CNTF is a survival factor for various neuronal cell types. Seems to prevent the degeneration of motor axons after axotomy.
	Background: Ciliary neurotrophic factor(CNTF) is a potent polypeptide hormone whose actions appear to be restricted to the nervous system where it promotes survival, neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. The hCNTF gene is located on chromosome 11, as determined using human-hamster somatic cell hybrids. The CNTF protein is highly conserved in evolution. The amino acid(aa) sequences of rat and rabbit CNTF translated from cDNAs display approx. 85 % homology with the deduced aa sequence encoding hCNTF. CNTF induces weight loss and improves glucose tolerance in humans and rodents. CNTF is thought to act centrally by inducing hypothalamic neurogenesis to modulate food intake and peripherally by altering hepatic gene expression, in a manner similar to that of leptin.
	Synonyms: Ciliary neurotrophic factor,CNTF,Cntf,
	Full Gene Name: Ciliary neurotrophic factor
	Cellular Localisation: Cytoplasm.
Gene ID:	25707
UniProt:	P20294
Pathways:	JAK-STAT Signaling

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Nervous system.
Plate:	Pre-coated

Application Details

Protocol:	rat CNTF ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CNTF has been precoated onto 96-well plates. Standards(E.coli, A2-M200) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CNTF is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the rat CNTF amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL rat CNTF 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 rat cell culture supernates, serum or plasma(heparin, EDTA, citrate) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each rat CNTF standard solution and each sample is measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 107, Standard deviation: 4.8, CV(%): 4.5 • Sample 2: n=16, Mean(pg/ml): 452, Standard deviation: 18.9, CV(%): 4.2 • Sample 3: n=16, Mean(pg/ml): 1287, Standard deviation: 50.2, CV(%): 3.9, • Sample 1: n=24, Mean(pg/ml): 193, Standard deviation: 16.2, CV(%): 8.4 • Sample 2: n=24, Mean(pg/ml): 643, Standard deviation: 52.7, CV(%): 8.2 • Sample 3: n=24, Mean(pg/ml): 1057, Standard deviation: 77.2, CV(%): 7.3
Restrictions:	For Research Use only

Handling

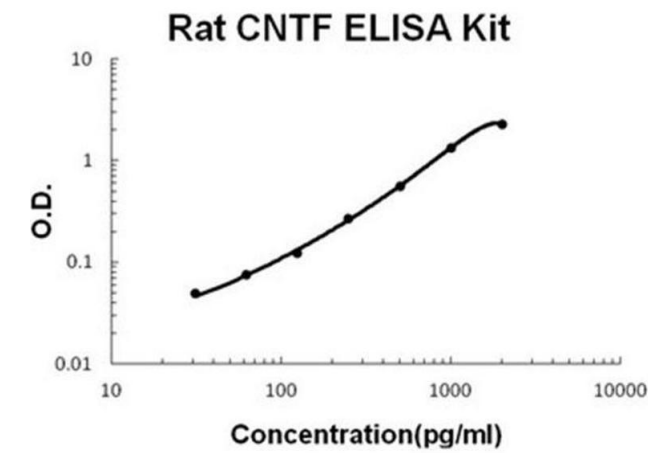|	
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Publications

Product cited in:	Sun, Zhu, Yin, Guo, Xu, Xiao, Jiang, Guo, Meng, Lu, Wang, Peng: "Differentiation of adipose-derived stem cells into Schwann cell-like cells through intermittent induction: potential advantage of cellular transient memory function." in: **Stem cell research & therapy**, Vol. 9, Issue

Publications

1, pp. 133, (2018) (PubMed).

Images

Rat CNTF ELISA Kit

ELISA
Image 1. Rat CNTF PicoKine ELISA Kit standard curve