Datasheet for ABIN1112668

Neurotrophin 3 ELISA Kit

Go to Product page

Overview

Quantity:	96 tests
Target:	Neurotrophin 3 (NTF3)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	For quantitative detection of NT-3 in human serum, body fluids, tissue lysates or cell culture supernatants.
Sample Type:	Cell Culture Supernatant, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 2 pg/mL
Components:	1. One 96-well plate pre-coated with anti-human NT-3 antibody 2. Lyophilized human NT-3 standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-human NT-3 antibody (Concentrated): 130myl.
Material not included:	1. 37 °C incubator 2. Microplate reader (wavelength: 450nm) 3. Precise pipette and disposable pipette tips 4. Automated plate washer 5. ELISA shaker 6. 1.5ml of Eppendorf tubes 7. Plate cover 8. Absorbent filter papers 9. Plastic or glass container with volume of above 1L

Target Details

Target:	Neurotrophin 3 (NTF3)
Alternative Name:	NT-3 (NTF3 Products)
Background:	Neurotrophin-3 is a neurotrophic factor in the NGF (Nerve Growth Factor) family of neurotrophins. It is encoded by the NTF3 gene, which localized to 12p13. It is a protein growth factor which has activity on certain neurons of the peripheral and central nervous system, it helps to support the survival and differentiation of existing neurons, and encourages the growth and differentiation of new neurons and synapses. Ramer et al. (2000) concluded that neurotrophic factor treatment may serve as a viable treatment in promoting recovery from root avulsion injuries. Although the vast majority of neurons in the mammalian brain are formed prenatally, parts of the adult brain retain the ability to grow new neurons from neural stem cells, a process known as neurogenesis.
Pathways:	RTK Signaling, Neurotrophin Signaling Pathway

Application Details

Comment:	This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-NT-3 polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-NT-3 polyclonal antibody was used as detection antibodies. The standards test samples and biotin conjugated detection antibody were added - the wells subsequently and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used - visualize HRP enzymatic reaction. TMB was catalyzed by HRP - produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional - the NT-3 amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of NT-3 can be calculated.
Plate:	Pre-coated
Reagent Preparation:	1. Before the experiment, centrifuge each kit component for several minutes to bring down all reagents to the bottom of tubes. 2. It is recommend to measure each standard and sample in duplicate. 3. Do NOT let the plate completely dry at any time! Since the dry condition can inactivate the biological material on the plate. 4. Do not reuse pipette tips and tubes to avoid cross contamination. 5. Do not use the expired components and the components from different batches. 6. To avoid the marginal effect of plate incubation for temperature differences (the marginal wells always get stronger reaction), it is recommend to equilibrate the ABC working solution and TMB substrate for at least 30 min at room temperature (37°C) before adding to

Application Details

	wells.The TMB substrate (Kit Component 8) is colorless and transparent before use, if not, please contact us for replacement.
Sample Preparation:	Preparation of sample and reagents 1. Sample Isolate the test samples soon after collecting, then, analyze immediately (within 2 hours). Or aliquot and store at -20 °C for long term. Avoid multiple freeze-thaw cycles. Tissue lysate, body fluids and cell culture supernatants: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °C. Serum: Coagulate the serum at room temperature (about 4 hours). Centrifuge at approximately 1000 × g for 10 min. Analyze the serum immediately or aliquot and store at -20 °C. Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN 3 can not be used as test sample preservative, since it is the inhibitor for HRP.
Restrictions:	For Research Use only

Handling

Preservative:	Sodium azide, Thimerosal (Merthiolate)