

Datasheet for ABIN1706065
Neurotrophin 4 ELISA Kit[Go to Product page](#)

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Overview

Quantity:	96 tests
Target:	Neurotrophin 4 (NTF4)
Binding Specificity:	AA 81-210
Reactivity:	Human
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 Human NT-4
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: sf21 Immunogen sequence: G81-A210
Specificity:	Expression system for standard: sf21 Immunogen sequence: G81-A210
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:	Neurotrophin 4 (NTF4)
Alternative Name:	NTF4 (NTF4 Products)
Background:	<p>Protein Function: Target-derived survival factor for peripheral sensory sympathetic neurons.</p> <p>Background: Neurotrophin-4(NT-4), also known as neurotrophin-5(NT-5), is a protein that in humans is encoded by the NTF4 gene. Human NT-4 as well as a human NT-4 pseudogene colocalize to chromosome 19 band q13.3. NT-4 is a member of a family of neurotrophic factors, the neurotrophins, that control survival and differentiation of vertebrate neurons(2-4). NT-4 is a neurotrophic factor that signals predominantly through the TrkB receptor tyrosine kinase. NT4 plays a physiological role essential for hippocampus- and amygdala-dependent long-term memory and hippocampal long-lasting LTP and that NT4 may be useful in the therapy of acquired disorders of learning and memory.</p> <p>Synonyms: Neurotrophin-4,NT-4,Neurotrophin-5,NT-5,Neutrophic factor 4,NTF4,NTF5,</p> <p>Full Gene Name: Neurotrophin-4</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	4909
UniProt:	P34130
Pathways:	RTK 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: Highest levels in prostate, lower levels in thymus, placenta, and skeletal muscle. Expressed in embryonic and adult tissues.
Plate:	Pre-coated
Protocol:	human NT-4 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay

Application Details

technology. A monoclonal antibody from mouse specific for NT-4 has been precoated onto 96-well plates. Standards(sf21, G81-A210) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for NT-4 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 human NT-4 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 human NT-4 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 human cell culture supernates or serum to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human NT-4 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 248, Standard deviation: 11.16, CV(%): 4.5
- Sample 2: n=16, Mean(pg/ml): 745, Standard deviation: 38, CV(%): 5.1
- Sample 3: n=16, Mean(pg/ml): 1243, Standard deviation: 78.31, CV(%): 6.3,
- Sample 1: n=24, Mean(pg/ml): 280, Standard deviation: 14.84, CV(%): 5.3
- Sample 2: n=24, Mean(pg/ml): 821, Standard deviation: 46, CV(%): 5.6
- Sample 3: n=24, Mean(pg/ml): 1402, Standard deviation: 96.74, CV(%): 6.9

Restrictions: For Research Use only

Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

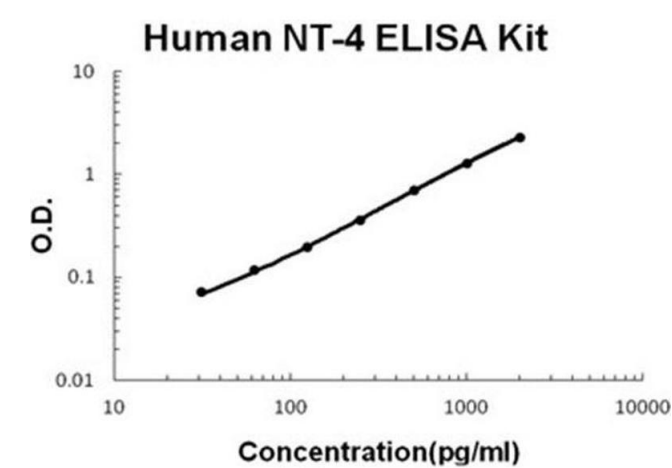
Storage: -20 °C, 4 °C

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: Guo, Nan, Hu, Meng, Hui, Zhang, Qin, Sui: "Prognostic significance of co-expression of nm23 and p57 protein in hepatocellular carcinoma." in: **Hepatology research : the official journal of the Japan Society of Hepatology**, Vol. 40, Issue 11, pp. 1107-16, (2010) ([PubMed](#)).



ELISA

Image 1. Human NT-4 PicoKine ELISA Kit standard curve