

Datasheet for ABIN2859309

NGFR ELISA Kit[Go to Product page](#)**1** Image**1** Publication

Overview

Quantity:	96 tests
Target:	NGFR
Binding Specificity:	AA 29-250
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human TNFRSF16/NGFR
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: sf21 Immunogen sequence: K29-N250
Specificity:	Sf21, K29-N250
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/mL

Product Details

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:	NGFR
Alternative Name:	NGFR (NGFR Products)
Background:	<p>Protein Function: Plays a role in the regulation of the translocation of GLUT4 to the cell surface in adipocytes and skeletal muscle cells in response to insulin, probably by regulating RAB31 activity, and thereby contributes to the regulation of insulin-dependent glucose uptake (By similarity). Low affinity receptor which can bind to NGF, BDNF, NT-3, and NT-4. Can mediate cell survival as well as cell death of neural cells. Necessary for the circadian oscillation of the clock genes ARNTL/BMAL1, PER1, PER2 and NR1D1 in the suprachiasmatic nucleus (SCN) of the brain and in liver and of the genes involved in glucose and lipid metabolism in the liver. .</p> <p>Background: Nerve growth factor receptor (NGFR) is also referred to as p75(NTR) because of its ability to bind at low affinity not only to NGF, but also other neurotrophins including brain-derived neurotrophic factor (BDNF), neurotrophin-3 and neurotrophin-4/5. The nerve growth factor receptor gene is at human chromosome region 17q12-17q22, distal to the chromosome 17 breakpoint in acute leukemias. The neurotrophin receptor p75(NTR), a tumor necrosis factor receptor superfamily member expressed in hepatic stellate cells after fibrotic and cirrhotic liver injury in humans, is a regulator of liver repair. In mice, depletion of p75(NTR) exacerbated liver pathology and inhibited hepatocyte proliferation in vivo. In addition, it is showed that neurotrophins activate p75(NTR) to induce apoptosis through the induction of the sphingomyelin (SM) cycle and increased production of ceramide. Overexpression of p75(NTR) is also found to activate the SM pathway.</p> <p>Synonyms: Tumor necrosis factor receptor superfamily member 16,Gp80-LNGFR,Low affinity neurotrophin receptor p75NTR,Low-affinity nerve growth factor receptor,NGF receptor,p75 ICD,CD271,NGFR,TNFRSF16,</p> <p>Full Gene Name: Tumor necrosis factor receptor superfamily member 16</p> <p>Cellular Localisation: Membrane, Single-pass type I membrane protein.</p>

Gene ID:	4804
UniProt:	P08138
Pathways:	NF-kappaB Signaling , Neurotrophin Signaling Pathway , Carbohydrate Homeostasis , Growth

Target Details

Factor Binding

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.
Plate:	Pre-coated
Protocol:	human TNFRSF16 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for TNFRSF16 has been precoated onto 96-well plates. Standards (sf21, K29 - N250) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TNFRSF16 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 TNFRSF16 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL human TNFRSF16 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, serum or plasma (heparin, EDTA, citrate) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human TNFRSF16 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 81, Standard deviation: 4.21, CV(%): 5.2• Sample 2: n=16, Mean(pg/ml): 330, Standard deviation: 21.45, CV(%): 6.5• Sample 3: n=16, Mean(pg/ml): 1560, Standard deviation: 90.48, CV(%): 5.8,• Sample 1: n=24, Mean(pg/ml): 85, Standard deviation: 5.27, CV(%): 6.2• Sample 2: n=24, Mean(pg/ml): 360, Standard deviation: 27, CV(%): 7.5• Sample 3: n=24, Mean(pg/ml): 1350, Standard deviation: 90.45, CV(%): 6.7
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C, 4 °C

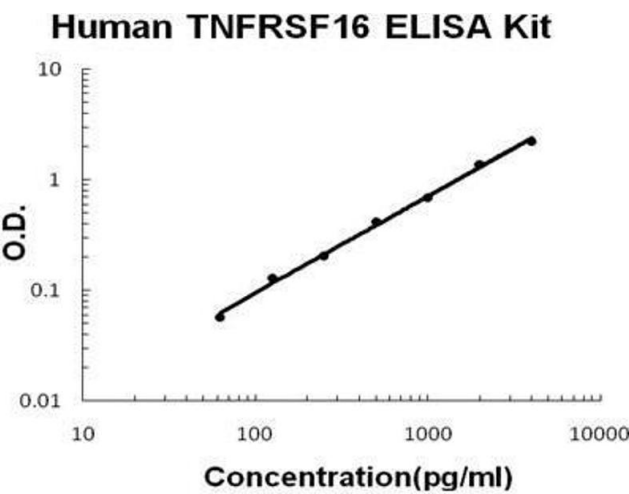
Handling

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:	Zakharyan, Atshemyan, Gevorgyan, Boyajyan: "Nerve growth factor and its receptor in schizophrenia." in: BBA clinical , Vol. 1, pp. 24-9, (2015) (PubMed).
-------------------	--

Images



ELISA

Image 1. Human TNFRSF16/NGFR PicoKine ELISA Kit standard curve