Human neuropeptide Y (NPY) ELISA kit

Product Code	CSB-E08168h
Abbreviation	NPY
Target Name	neuropeptide Y
Uniprot No.	P01303
Alias	PYY4, OTTHUMP00000201946|OTTHUMP00000201947
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates, cell lysates
Detection Range	0.78 pg/mL-50 pg/mL
Sensitivity	0.195 pg/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	Neuroscience
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	NPY
Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate --- The 96-well plate has been pre-coated with an anti-human NPY antibody. This dismountable microplate can be divided into 12 x 8 strip plates. Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series,

read the OD values, and then draw a standard curve.
One vial Biotin-labeled NPY antibody (100 x concentrate) (120 µl/bottle) ---Act as the detection antibody.
One vial HRP-avidin (100 x concentrate) (120 µl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.
One vial Biotin-antibodyDiluent (15 ml/bottle) ---Dilute the Biotin-antibody.
One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution.
One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration.
One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances.
One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.
One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.
Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation.
An instruction manual

Description

This Human NPY ELISA Kit was designed for the quantitative measurement of Human NPY protein in serum, plasma, cell culture supernates, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 0.78 pg/mL-50 pg/mL and the sensitivity is 0.195 pg/mL .

Target Details

This gene encodes a neuropeptide that is widely expressed in the central nervous system and influences many physiological processes, including cortical excitability, stress response, food intake, circadian rhythms, and cardiovascular function. The neuropeptide functions through G protein-coupled receptors to inhibit adenylyl cyclase, activate mitogen-activated protein kinase (MAPK), regulate intracellular calcium levels, and activate potassium channels. A polymorphism in this gene resulting in a change of leucine 7 to proline in the signal peptide is associated with elevated cholesterol levels, higher alcohol consumption, and may be a risk factor for various metabolic and cardiovascular diseases.

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 human NPY 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)
1:5	Average %	95
	Range %	82-101
1:10	Average %	94
	Range %	86-103

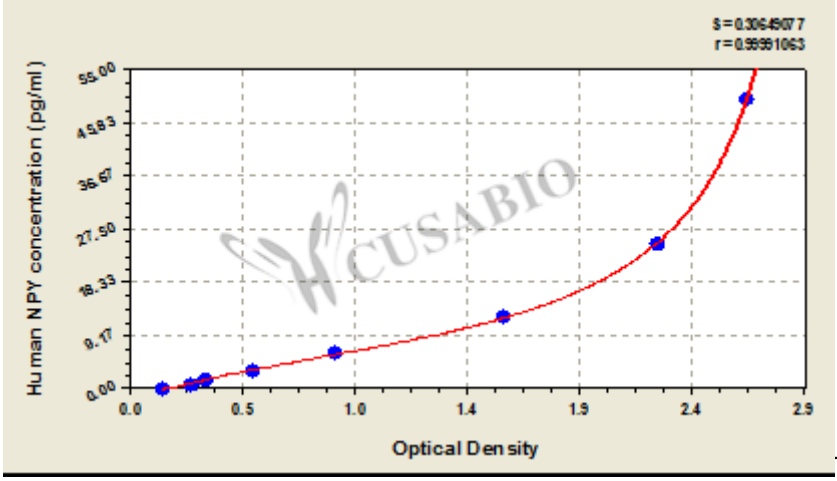
1:20	Average %	87
	Range %	82-94
1:40	Average %	95
	Range %	88-100

Recovery

The recovery of human NPY 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)	95	89-100
EDTA plasma (n=4)	90	85-96

Typical



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

pg/ml	OD1	OD2	Average	Corrected
50	2.653	2.561	2.607	2.458
25	2.175	2.284	2.230	2.081
12.5	1.596	1.574	1.585	1.436
6.25	0.895	0.863	0.879	0.730
3.13	0.517	0.542	0.530	0.381
1.57	0.341	0.326	0.334	0.185

0.780	0.278	0.266	0.272	0.123
0	0.147	0.150	0.149	?

Msds

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