



Human Neurofilament protein H (NF-H) ELISA kit

Product Code	CSB-E16097h
Abbreviation	NEFH
Target Name	neurofilament, heavy polypeptide
Uniprot No.	P12036
Alias	NFH, neurofilament triplet H protein neurofilament, heavy polypeptide 200kDa
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cerebrospinal fluid (CSF)
Detection Range	0.625 ng/mL-40 ng/mL
Sensitivity	0.156 ng/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	<p>A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm.</p> <p>An incubator can provide stable incubation conditions up to 37°C±5°C.</p> <p>Centrifuge</p> <p>Vortex</p> <p>Squirt bottle, manifold dispenser, or automated microplate washer</p> <p>Absorbent paper for blotting the microtiter plate</p> <p>50-300ul multi-channel micropipette</p> <p>Pipette tips</p> <p>Single-channel micropipette with different ranges</p> <p>100ml and 500ml graduated cylinders</p> <p>Deionized or distilled water</p> <p>Timer</p> <p>Test tubes for dilution</p>
Gene Names	NEFH
Tag Info	quantitative
Protein Description	Sandwich
Component	<p>A micro ELISA plate --- The 96-well plate has been pre-coated with an anti-human NF-H antibody. This dismountable microplate can be divided into 12 x 8 strip plates.</p> <p>Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series,</p>



read the OD values, and then draw a standard curve.

One vial Biotin-labeled NF-H 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 NEFH ELISA Kit was designed for the quantitative measurement of Human NEFH protein in serum, plasma, cerebrospinal fluid (CSF). It is a Sandwich ELISA kit, its detection range is 0.625 ng/mL-40 ng/mL and the sensitivity is 0.156 ng/mL.

Target Details

Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and functionally maintain neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the heavy neurofilament protein. This protein is commonly used as a biomarker of neuronal damage and susceptibility to amyotrophic lateral sclerosis (ALS) has been associated with mutations in this gene.

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 NF-H 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)
1:1	Average %	92
	Range %	86-98
1:2	Average %	97
	Range %	93-101
1:4	Average %	93
	Range %	84-97



1:8	Average %	103
	Range %	95-107

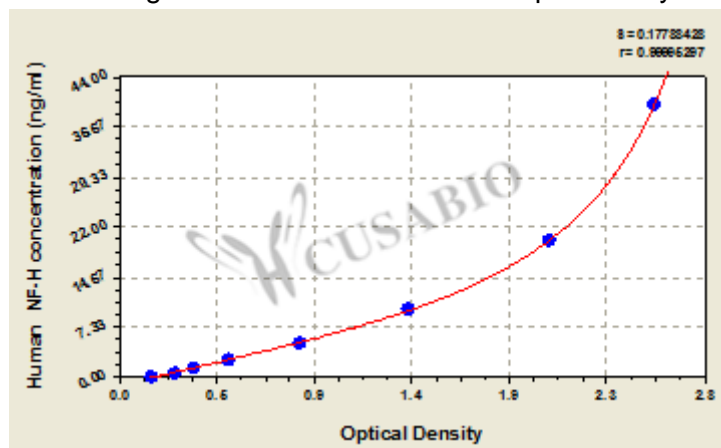
Recovery

The recovery of Human NF-H 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)	85	80-90
EDTA plasma (n=4)	94	88-98

Typical

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



ng/ml	OD1	OD2	Average	Corrected
40	2.513	2.614	2.564	2.396
20	2.017	2.115	2.066	1.898
10	1.442	1.343	1.393	1.225
5	0.887	0.864	0.876	0.708
2.5	0.531	0.545	0.538	0.370
1.25	0.374	0.362	0.368	0.200
0.625	0.276	0.284	0.280	0.112
0	0.167	0.168	0.168	

Msds

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