Rat Neurofilament light polypeptide(NEFL) ELISA kit

Product Code	CSB-EL015688RA
Abbreviation	NEFL
Target Name	neurofilament, light polypeptide
Uniprot No.	P19527
Alias	CMT1F, CMT2E, FLJ53642, NF-L, NF68, NFL, light molecular weight neurofilament protein|neurofilament protein, light chain|neurofilament subunit NF-L|neurofilament triplet L protein|neurofilament, lig
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	7.8 pg/mL-500 pg/mL
Sensitivity	1.95 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
Gene Names	Nefl
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat NEFL ELISA Kit was designed for the quantitative measurement of Rat NEFL protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 7.8 pg/mL-500 pg/mL and the sensitivity is 1.95 pg/mL.
Target Details	Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and they functionally maintain the neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the light chain neurofilament protein. Mutations in this gene cause Charcot-Marie-Tooth disease types 1F (CMT1F) and 2E (CMT2E), disorders of the peripheral nervous system that are characterized by distinct neuropathies. A pseudogene has been identified on chromosome Y.
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 rat NEFL 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 %	94
	Range %	85-98
1:2	Average %	107
	Range %	97-111
1:4	Average %	90
	Range %	83-94
1:8	Average %	97
	Range %	91-102

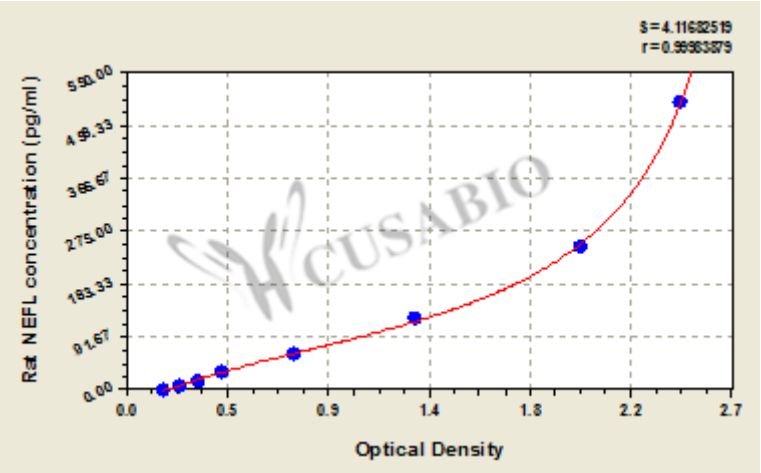
Recovery

The recovery of rat NEFL 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)	90	82-94
EDTA plasma (n=4)	99	91-104

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
500	2.516	2.411	2.464	2.287
250	2.052	1.987	2.020	1.843
125	1.297	1.282	1.290	1.113
62.5	0.725	0.784	0.755	0.578
31.2	0.442	0.437	0.440	0.263
15.6	0.338	0.330	0.334	0.157
7.8	0.259	0.249	0.254	0.077
0	0.178	0.176	0.177	

Msds	{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL015688RA.pdf","filename":"MSDS"}}