



Human Huntingtin(HTT) ELISA kit

Product Code	CSB-EL010905HU
Abbreviation	HTT
Protein Biological Process 1	Apoptosis/Autophagy
Target Name	huntingtin
Uniprot No.	P42858
Alias	HD, IT15
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Apoptosis
Sample Types	serum, plasma, tissue homogenates
Detection Range	12.5 pg/mL-800 pg/mL
Sensitivity	3.125 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	Cell Biology
Gene Names	HTT
Tag Info	quantitative
Protein Description	Sandwich

Description

This Human HTT ELISA Kit was designed for the quantitative measurement of Human HTT protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 12.5 pg/mL-800 pg/mL and the sensitivity is 3.125 pg/mL.

Target Details

Huntingtin is a disease gene linked to Huntington s disease, a neurodegenerative disorder characterized by loss of striatal neurons. This is thought to be caused by an expanded, unstable trinucleotide repeat in the huntingtin gene, which translates as a polyglutamine repeat in the protein product. A fairly broad range in the number of trinucleotide repeats has been identified in normal controls, and repeat numbers in excess of 40 have been described as pathological. The huntingtin locus is large, spanning 180 kb and



consisting of 67 exons. The huntingtin gene is widely expressed and is required for normal development. It is expressed as 2 alternatively polyadenylated forms displaying different relative abundance in various fetal and adult tissues. The larger transcript is approximately 13.7 kb and is expressed predominantly in adult and fetal brain whereas the smaller transcript of approximately 10.3 kb is more widely expressed. The genetic defect leading to Huntington's disease may not necessarily eliminate transcription, but may confer a new property on the mRNA or alter the function of the protein. One candidate is the huntingtin-associated protein-1, highly expressed in brain, which has increased affinity for huntingtin protein with expanded polyglutamine repeats. This gene contains an upstream open reading frame in the 5' UTR that inhibits expression of the huntingtin gene product through translational repression.

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 HTT 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 %	87
	Range %	82-91
1:2	Average %	94
	Range %	89-98
1:4	Average %	107
	Range %	103-110
1:8	Average %	110
	Range %	104-114

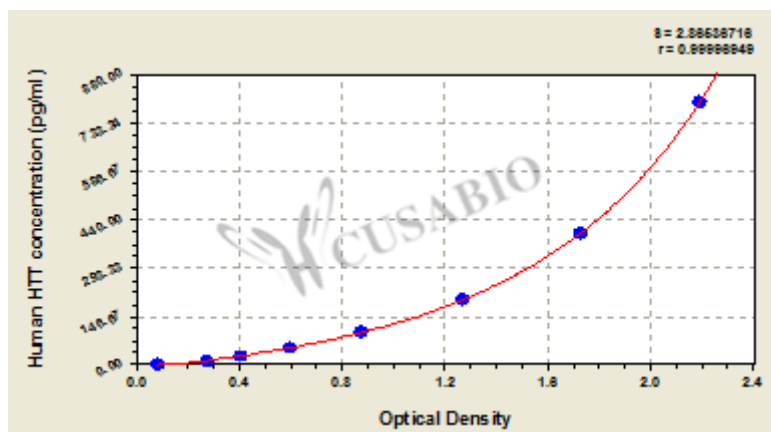
Recovery

The recovery of human HTT 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	91-99
EDTA plasma (n=4)	103	98-108

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
800	2.245	2.198	2.222	2.134
400	1.742	1.765	1.754	1.666
200	1.278	1.301	1.290	1.202
100	0.890	0.891	0.891	0.803
50	0.615	0.604	0.610	0.522
25	0.411	0.421	0.416	0.328
12.5	0.283	0.286	0.285	0.197
0	0.089	0.086	0.088	?

Msds

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