



# Human cathepsin B (CTSB) ELISA kit

<b>Product Code</b>	CSB-E13450h
<b>Abbreviation</b>	CTSB
<b>Target Name</b>	cathepsin B
<b>Uniprot No.</b>	P07858
<b>Alias</b>	APPS, CPSB, APP secretase amyloid precursor protein secretase cathepsin B1 cysteine protease preprocathepsin B
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Sample Types</b>	serum, plasma, tissue homogenates
<b>Detection Range</b>	0.312 ng/mL-20 ng/mL
<b>Sensitivity</b>	0.078 ng/mL
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Signal Transduction
<b>Gene Names</b>	CTSB
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich
<b>Description</b>	This Human CTSB ELISA Kit was designed for the quantitative measurement of Human CTSB protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.312 ng/mL-20 ng/mL and the sensitivity is 0.078 ng/mL.
<b>Target Details</b>	This protein is a lysosomal cysteine proteinase composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. It is also known as amyloid precursor protein secretase and is involved in the proteolytic processing of amyloid precursor protein (APP). Incomplete proteolytic processing of APP has been suggested to be a causative factor in Alzheimer disease, the most common cause of dementia. Overexpression of the encoded protein, which is a member of the peptidase C1 family, has been associated with esophageal adenocarcinoma and other tumors. At least five transcript variants encoding the same protein have been found for this gene.
<b>Product Precision</b>	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 CTSB 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 %	88-96
1:2	Average %	93
	Range %	89-97
1:4	Average %	98
	Range %	94-102
1:8	Average %	88
	Range %	86-92

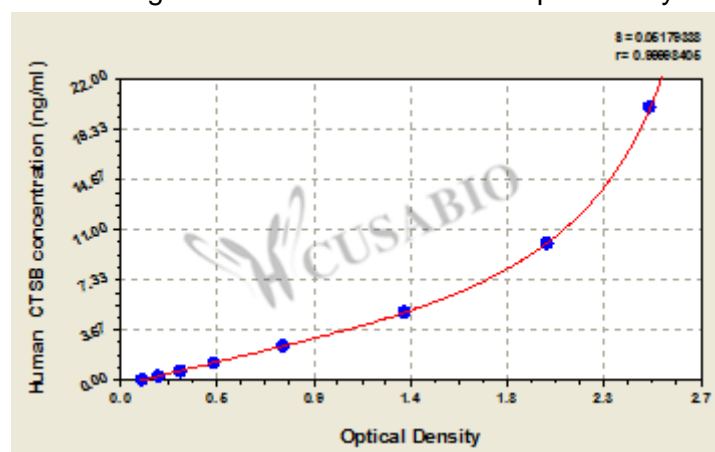
## Recovery

The recovery of human CTSB 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)	94	90-98
EDTA plasma (n=4)	87	83-92

## 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
20	2.544	2.413	2.479	2.364
10	2.053	1.941	1.997	1.882
5	1.354	1.312	1.333	1.218
2.5	0.772	0.764	0.768	0.653
1.25	0.454	0.441	0.448	0.333
0.625	0.282	0.297	0.290	0.175
0.312	0.182	0.187	0.185	0.070
0	0.114	0.115	0.115	



## Msd

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