



# Human cystathionine $\beta$ -synthase(CBS) ELISA Kit

<b>Product Code</b>	CSB-E13314h
<b>Protein Biological Process 2</b>	Amino-acid biosynthesis and metabolism
<b>Abbreviation</b>	CBS
<b>Protein Biological Process 1</b>	Biosynthesis/Metabolism
<b>Target Name</b>	cystathionine-beta-synthase
<b>Uniprot No.</b>	P35520
<b>Alias</b>	HIP4, OTTHUMP00000109415 OTTHUMP00000109416 OTTHUMP00000109418 bet a-thionase cystathionine beta-synthase methylcysteine synthase serine sulfhydrase cystathionine $\beta$ -synthase(CBS) cystathionine beta-synthase(CBS)
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Protein Biological Process 3</b>	Amino-acid biosynthesis
<b>Sample Types</b>	serum, plasma, tissue homogenates, cell lysates
<b>Detection Range</b>	125 pg/mL-8000 pg/mL
<b>Sensitivity</b>	31.25 pg/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>	Metabolism
<b>Gene Names</b>	CBS
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich
<b>Description</b>	This Human CBS ELISA Kit was designed for the quantitative measurement of Human CBS protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 125 pg/mL-8000 pg/mL and the sensitivity is 31.25 pg/mL.
<b>Target Details</b>	This protein acts as a homotetramer to catalyze the conversion of homocysteine to cystathionine, the first step in the transsulfuration pathway. The encoded



protein is allosterically activated by adenosyl-methionine and uses pyridoxal phosphate as a cofactor. Defects in this gene can cause cystathionine beta-synthase deficiency (CBS), which can lead to homocystinuria.

## 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 CBS 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 %	90-98
1:2	Average %	106
	Range %	102-110
1:4	Average %	96
	Range %	90-101
1:8	Average %	88
	Range %	86-96

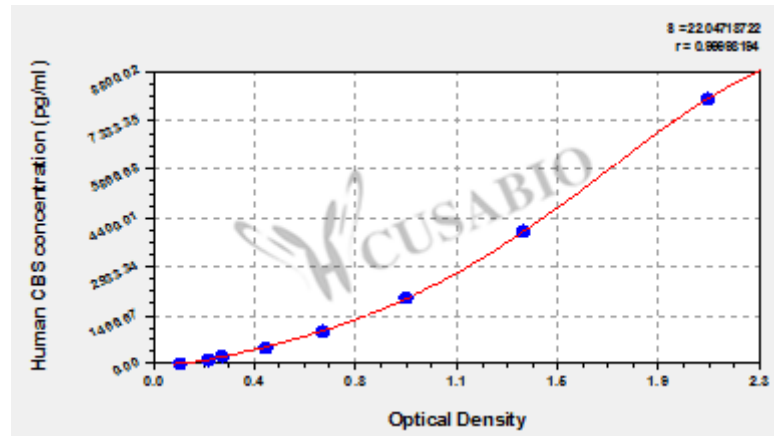
## Recovery

The recovery of human CBS 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)	103	98-106
EDTA plasma (n=4)	94	91-97

## 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
8000	2.144	2.033	2.089	1.978
4000	1.388	1.411	1.400	1.289
2000	0.932	0.989	0.961	0.850
1000	0.655	0.636	0.646	0.535
500	0.445	0.424	0.435	0.324
250	0.266	0.268	0.267	0.156
125	0.212	0.221	0.217	0.106
0	0.110	0.112	0.111	?

## Msds

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