





Human Thiamin pyrophosphokinase 1(TPK1) **ELISA** kit

Product Code	CSB-EL024103HU
Abbreviation	TPK1
Target Name	thiamin pyrophosphokinase 1
Uniprot No.	Q9H3S4
Alias	HTPK1, PP20, placental protein 20 thiamine diphosphokinase thiamine kinase
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	31.25 pg/mL-2000 pg/mL
Sensitivity	7.8 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	Others
Gene Names	TPK1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human TPK1 ELISA Kit was designed for the quantitative measurement of Human TPK1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 31.25 pg/mL-2000 pg/mL and the sensitivity is 7.8 pg/mL.
Target Details	This gene encodes a protein, that exists as a homodimer, which catalyzes the conversion of thiamine to thiamine pyrophosphate. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.
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 TPK1 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 %	91
	Range %	86-95
1:2	Average %	102
	Range %	97-107
1:4	Average %	91
	Range %	85-97
1:8	Average %	97
	Range %	91-103

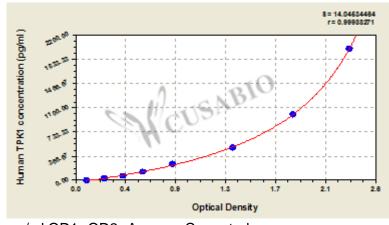
Recovery

The recovery of human TPK1 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	89-98
EDTA plasma (n=4)	97	90-100

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

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2000	2.3292	2.368	2.349	2.243	
1000	1.876 1	1.857	1.867	1.761	
500	1.339 1	1.368	1.354	1.248	
250	0.843	0.839	0.841	0.735	
125	0.566	0.599	0.583	0.477	
62.5	0.411 (0.423	0.417	0.311	
31.25	0.250	0.259	0.255	0.149	
0	0.105	0.107	0.106		

Msds

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