



Human cyclophilin B,CyPB ELISA Kit

Product Code	CSB-E11218h
Abbreviation	PPIB
Target Name	peptidylprolyl isomerase B (cyclophilin B)
Uniprot No.	P23284
Alias	CYP-S1, CYPB, MGC14109, MGC2224, OI9, SCYLP, PPIase S-cyclophilin cyclophilin-like protein peptidyl-prolyl cis-trans isomerase B peptidylprolyl isomerase B rotamase
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, cell lysates, tissue homogenates
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	PPIB
Tag Info	quantitative
Protein Description	Sandwich

Description

The human cyclophilin B (CyPB) ELISA Kit is used to quantitatively measure CyPB concentrations in human serum, plasma, cell lysates, and tissue homogenates. It performs well in important characteristics, including sensitivity, specificity, precision, recovery, linearity, and lot-to-lot consistency. This assay is based on the sandwich ELISA mechanism and enzyme-substrate chromogenic reaction. The solution color develops proportionally to the amount of CyPB in the sample. And the intensity of the color can be measured at 450 nm via a microplate reader.

CyPB, also known as PPIB, is an immunophilin with cis-trans peptidyl-prolyl isomerase (PPIase) and chaperone-like activities. It functions to protect cells against aldosterone-induced oxidative stress, endoplasmic reticulum stress (ERS), and tubular cell injury via its PPIase activity. Furthermore, CyPB also participates in transcriptional regulation, protein secretion, immune response, apoptosis, and other cellular processes. Many studies have shown that CyPB plays an important role in the replication of several viruses, including the



Japanese encephalitis virus (JEV), hepatitis C virus (HCV), and human papillomavirus type 16 (HPV 16).

Target Details

This protein is a cyclosporine-binding protein and is mainly located within the endoplasmic reticulum. It is associated with the secretory pathway and released in biological fluids. This protein can bind to cells derived from T- and B-lymphocytes, and may regulate cyclosporine A-mediated immunosuppression. Variants have been identified in this protein that give rise to recessive forms of osteogenesis imperfecta.

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 CyPB 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 %	84
	Range %	80-92
1:2	Average %	90
	Range %	85-85
1:4	Average %	92
	Range %	88-98
1:8	Average %	98
	Range %	93-104

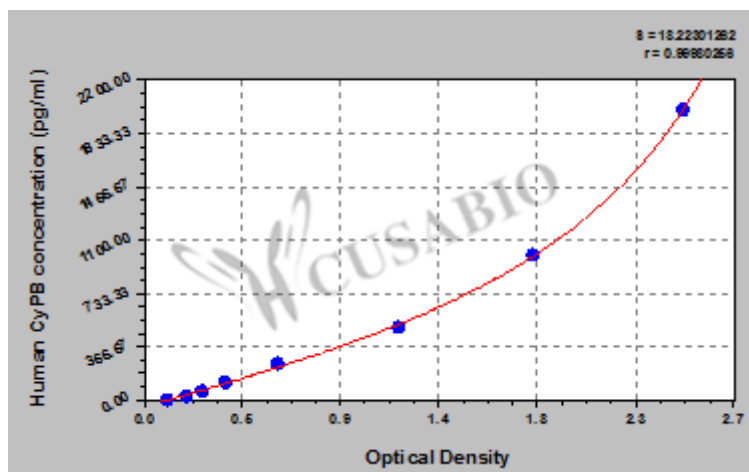
Recovery

The recovery of human CyPB 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)	100	95-109
EDTA plasma (n=4)	99	93-105

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
2000	2.545	2.402	2.474	2.359
1000	1.732	1.846	1.789	1.674
500	1.187	1.164	1.176	1.061
250	0.604	0.639	0.622	0.507
125	0.392	0.374	0.383	0.268
62.5	0.268	0.280	0.274	0.159
31.25	0.201	0.208	0.205	0.090
0	0.118	0.112	0.115	

Msds

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