Human plasma kallikrein(KLKB1) ELISA kit

Product Code	CSB-E14339h
Abbreviation	KLKB1
Protein Biological Process 1	Blood Coagulation
Target Name	kallikrein B, plasma (Fletcher factor) 1
Uniprot No.	P03952
Alias	KLK3, PPK, Fletcher factor|kininogenin|plasma kallikrein B1|plasma kallikrein heavy chain|plasma kallikrein light chain
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Blood coagulation
Sample Types	serum, plasma
Detection Range	9.38 mU/mL-600 mU/mL
Sensitivity	2.34 mU/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	KLKB1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human KLKB1 ELISA Kit was designed for the quantitative measurement of Human KLKB1 protein in serum, plasma. It is a Sandwich ELISA kit, its detection range is 9.38 mU/mL-600 mU/mL and the sensitivity is 2.34 mU/mL.
Target Details	Plasma prekallikrein is a glycoprotein that participates in the surface-dependent activation of blood coagulation, fibrinolysis, kinin generation and inflammation. It is synthesized in the liver and secreted into the blood as a single polypeptide chain. Plasma prekallikrein is converted to plasma kallikrein by factor XIIa by the cleavage of an internal Arg-Ile bond. Plasma kallikrein therefore is composed of a heavy chain and a light chain held together by a disulphide bond. The heavy chain originates from the amino-terminal end of the zymogen and contains 4 tandem repeats of 90 or 91 amino acids. Each repeat harbors a novel structure

called the apple domain. The heavy chain is required for the surface-dependent pro-coagulant activity of plasma kallikrein. The light chain contains the active site or catalytic domain of the enzyme and is homologous to the trypsin family of serine proteases. Plasma prekallikrein deficiency causes a prolonged activated partial thromboplastin time in patients.

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 KLKB1 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)
1:100	Average %	96
	Range %	89-100
1:200	Average %	90
	Range %	85-98
1:400	Average %	87
	Range %	83-93
1:800	Average %	92
	Range %	88-96

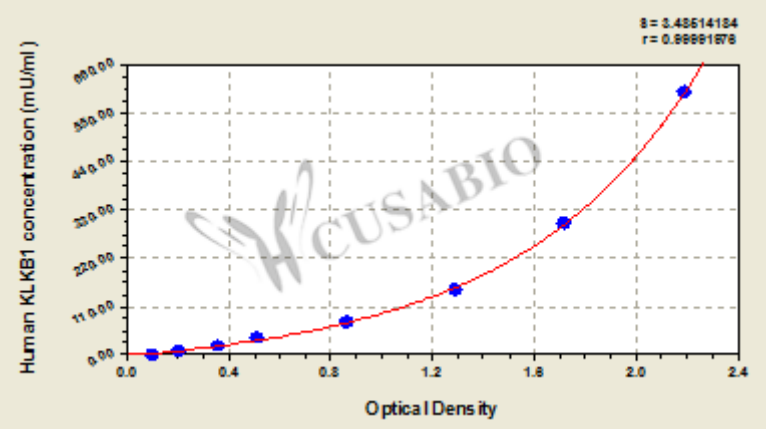
Recovery

The recovery of human KLKB1 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	80-103
EDTA plasma (n=4)	96	86-106

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



mU/ml	OD1	OD2	Average	Corrected
600	2.101	2.207	2.154	2.048
300	1.695	1.687	1.691	1.585
150	1.261	1.278	1.270	1.164
75	0.842	0.867	0.855	0.749
37.5	0.503	0.514	0.509	0.403
18.75	0.345	0.368	0.357	0.251
9.38	0.201	0.211	0.206	0.100
0	0.105	0.107	0.106	?

Msds {"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E14339h.pdf","filename":"MSDS"}}