Human complement factor I(CFI) ELISA Kit

Product Code	CSB-E13108h
Abbreviation	CFI
Protein Biological Process 1	Complement
Target Name	complement factor I
Uniprot No.	P05156
Alias	AHUS3, C3BINA, C3b-INA, FI, IF, KAF, C3B/C4B inactivator|C3b-inactivator|Konglutinogen-activating factor|complement component I|complement control protein factor I|complement factor I heavy chain|li
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Complement pathway
Sample Types	serum, plasma, tissue homogenates
Detection Range	6.25 ng/mL-400 ng/mL
Sensitivity	1.56 ng/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	Immunology
Gene Names	CFI
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human CFI ELISA Kit was designed for the quantitative measurement of Human CFI protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 6.25 ng/mL-400 ng/mL and the sensitivity is 1.56 ng/mL .
Target Details	This gene encodes a serine proteinase that is essential for regulating the complement cascade. The encoded preproprotein is cleaved to produce both heavy and light chains, which are linked by disulfide bonds to form a heterodimeric glycoprotein. This heterodimer can cleave and inactivate the complement components C4b and C3b, and it prevents the assembly of the C3 and C5 convertase enzymes. Defects in this gene cause complement factor I

deficiency, an autosomal recessive disease associated with a susceptibility to pyogenic infections. Mutations in this gene have been associated with a predisposition to atypical hemolytic uraemic syndrome, a disease characterized by acute renal failure, microangiopathic hemolytic anemia and thrombocytopenia. Primary glomerulonephritis with immmune deposits is another condition associated with mutation of this gene.

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 CFI 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)
1:200	Average %	92
	Range %	89-94
1:400	Average %	101
	Range %	98-103
1:800	Average %	92
	Range %	89-96
1:1600	Average %	97
	Range %	94-102

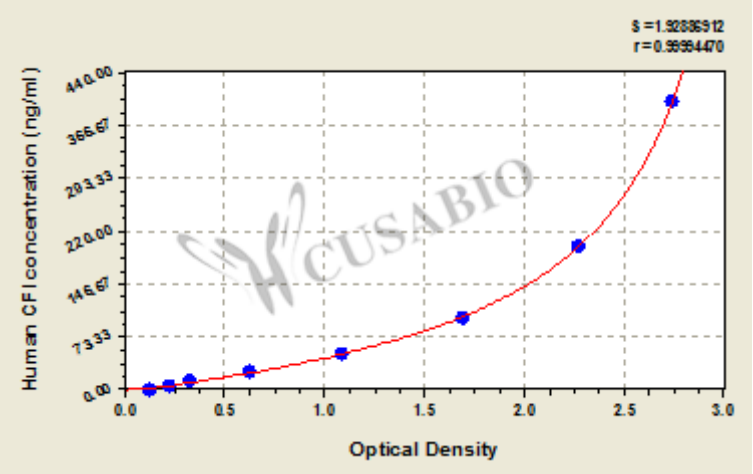
Recovery

The recovery of human CFI 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)	96	92-98

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
400	2.780	2.766	2.773	2.635
200	2.288	2.311	2.300	2.162
100	1.743	1.684	1.714	1.576
50	1.114	1.101	1.108	0.970
25	0.622	0.652	0.637	0.499
12.5	0.345	0.336	0.341	0.203
6.25	0.237	0.224	0.231	0.093
0	0.140	0.136	0.138	?

Msds

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