Human Acetyl-CoA carboxylase 1(ACACA) ELISA kit

Product Code	CSB-EL001119HU
Protein Biological Process 2	Lipogenesis and lipometabolism
Abbreviation	ACACA
Protein Biological Process 1	Biosynthesis/Metabolism
Target Name	acetyl-Coenzyme A carboxylase alpha
Uniprot No.	Q13085
Alias	ACAC, ACC, ACC1, ACCA, ACC-alpha|acetyl-CoA carboxylase 1|acetyl-CoA carboxylase-alpha
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Fatty acid biosynthesis
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	9.38 pg/mL-600 pg/mL
Sensitivity	2.34 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	Metabolism
Gene Names	ACACA
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human ACACA ELISA Kit was designed for the quantitative measurement of Human ACACA protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 9.38 pg/mL-600 pg/mL and the sensitivity is 2.34 pg/mL.
Target Details	Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes the carboxylation of acetyl-

CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. There are two ACC forms, alpha and beta, encoded by two different genes. ACC-alpha is highly enriched in lipogenic tissues. The enzyme is under long term control at the transcriptional and translational levels and under short term regulation by the phosphorylation/dephosphorylation of targeted serine residues and by allosteric transformation by citrate or palmitoyl-CoA. Multiple alternatively spliced transcript variants divergent in the 5 sequence and encoding distinct isoforms have been found for 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 ACACA 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)
1:5	Average %	98
	Range %	96-102
1:10	Average %	107
	Range %	103-114
1:20	Average %	94
	Range %	90-98
1:40	Average %	88
	Range %	86-95

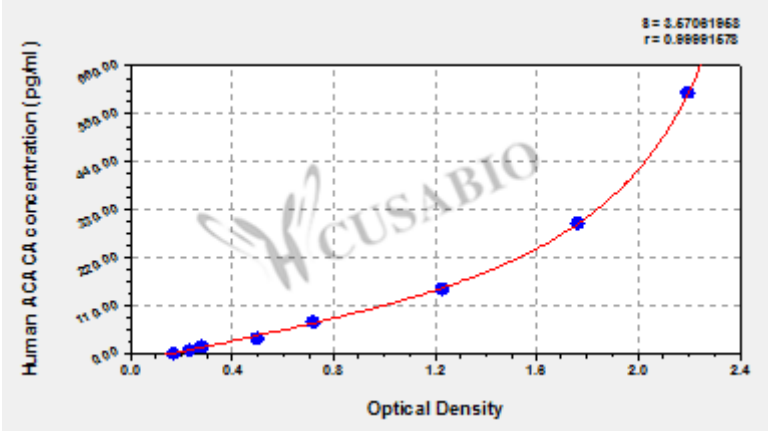
Recovery

The recovery of human ACACA 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)	105	99-108
EDTA plasma (n=4)	94	90-98

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
600	2.169	2.202	2.186	2.004
300	1.702	1.814	1.758	1.576
150	1.202	1.254	1.228	1.046
75	0.711	0.747	0.729	0.547
37.5	0.503	0.506	0.505	0.323
18.75	0.284	0.298	0.291	0.109
9.38	0.236	0.249	0.243	0.061
0	0.174	0.189	0.182	?

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Msds

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