



Human Sterol regulatory element-binding protein 1(SREBF1) ELISA kit

Product Code	CSB-EL022657HU
Protein Biological Process 2	Lipogenesis and lipometabolism
Abbreviation	SREBF1
Protein Biological Process 1	Biosynthesis/Metabolism
Target Name	sterol regulatory element binding transcription factor 1
Uniprot No.	P36956
Alias	SREBP-1c, SREBP1, bHLHd1, sterol regulatory element binding protein-1
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Cholesterol metabolism
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	7.8 pg/mL-500 pg/mL
Sensitivity	1.95 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	SREBF1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human SREBF1 ELISA Kit was designed for the quantitative measurement of Human SREBF1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 7.8 pg/mL-500 pg/mL and the sensitivity is 1.95 pg/mL.
Target Details	This gene encodes a transcription factor that binds to the sterol regulatory element-1 (SRE1), which is a decamer flanking the low density lipoprotein receptor gene and some genes involved in sterol biosynthesis. The protein is



synthesized as a precursor that is attached to the nuclear membrane and endoplasmic reticulum. Following cleavage, the mature protein translocates to the nucleus and activates transcription by binding to the SRE1. Sterols inhibit the cleavage of the precursor, and the mature nuclear form is rapidly catabolized, thereby reducing transcription. The protein is a member of the basic helix-loop-helix-leucine zipper (bHLH-Zip) transcription factor family. This gene is located within the Smith-Magenis syndrome region on chromosome 17. Two transcript variants encoding different 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 SREBF1 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 %	92
	Range %	88-99
1:2	Average %	90
	Range %	85-97
1:4	Average %	94
	Range %	90-100
1:8	Average %	94
	Range %	86-102

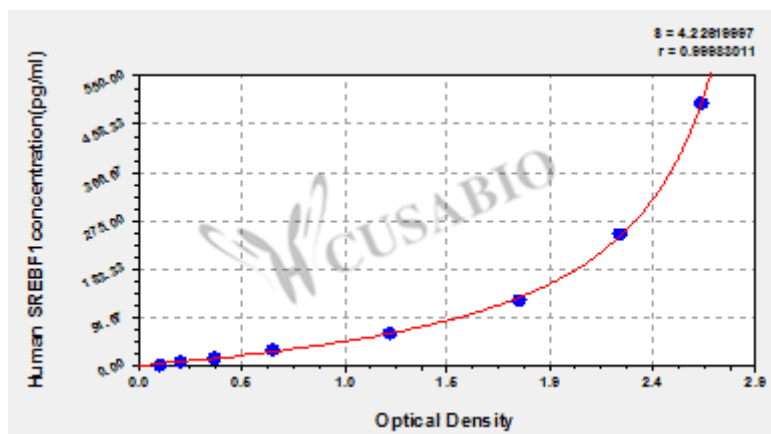
Recovery

The recovery of human SREBF1 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)	96	91-98
EDTA plasma (n=4)	97	92-100

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
500	2.617	2.658	2.638	2.532
250	2.246	2.273	2.260	2.154
125	1.786	1.790	1.788	1.682
62.5	1.175	1.199	1.187	1.081
31.2	0.638	0.639	0.639	0.533
15.6	0.369	0.355	0.362	0.256
7.8	0.196	0.207	0.202	0.096
0	0.105	0.106	0.106	?

Msds

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