



Human NAD-dependent deacetylase sirtuin-3, mitochondrial(SIRT3) ELISA kit

Product Code	CSB-EL021341HU
Abbreviation	SIRT3
Target Name	sirtuin (silent mating type information regulation 2 homolog) 3 (S. cerevisiae)
Uniprot No.	Q9NTG7
Alias	SIR2L3, mitochondrial nicotinamide adenine dinucleotide-dependent deacetylase silent mating type information regulation 2, S.cerevisiae, homolog 3 sir2-like 3 sirtuin 3 sirtuin type 3
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 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	Epigenetics and Nuclear Signaling
Gene Names	SIRT3
Tag Info	quantitative
Protein Description	Sandwich

Description

This Human SIRT3 ELISA Kit was designed for the quantitative measurement of Human SIRT3 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 3.9 pg/mL .

Target Details

This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. This protein is included in class I of the sirtuin family. Two alternatively spliced transcript variants that



encode different proteins have been described 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 SIRT3 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 %	89
	Range %	82-95
1:2	Average %	92
	Range %	86-99
1:4	Average %	98
	Range %	90-105
1:8	Average %	93
	Range %	88-100

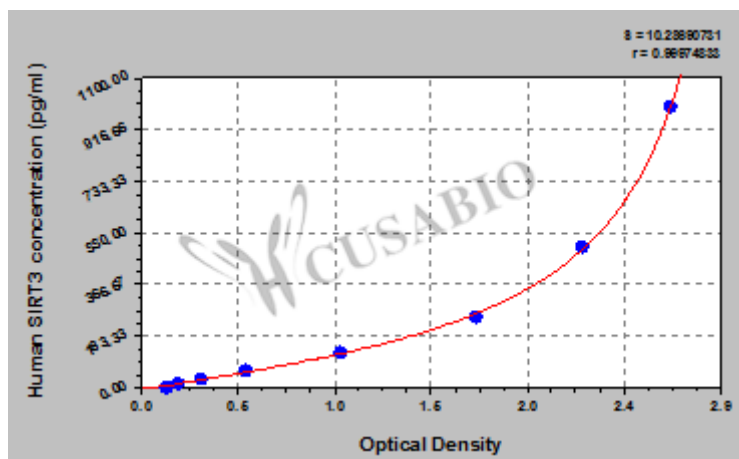
Recovery

The recovery of human SIRT3 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	90-103
EDTA plasma (n=4)	90	84-97

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
1000	2.743	2.612	2.678	2.540
500	2.312	2.156	2.234	2.096
250	1.713	1.686	1.700	1.562
125	1.021	1.009	1.015	0.877
62.5	0.514	0.557	0.536	0.398
31.2	0.321	0.301	0.311	0.173
15.6	0.203	0.196	0.200	0.062
0	0.139	0.137	0.138	?

Msds

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