Mouse Pulmonary Surfactant-associated protein C (SP-C) ELISA kit

Product Code	CSB-E12639m
Abbreviation	SFTPC
Protein Biological Process 1	Transport
Target Name	surfactant protein C
Uniprot No.	P21841
Alias	PSP-C, SFTP2, SMDP2, SP-C, pulmonary surfactant apoprotein-2 SP-C|surfactant, pulmonary-associated protein C
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Protein Biological Process 3	Gaseous exchange
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	2.3 ng/mL-150 ng/mL
Sensitivity	0.58 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	Signal Transduction
Gene Names	Sftpc
Tag Info	quantitative
Protein Description	Sandwich
Description	CUSABIO's mouse pulmonary surfactant-associated protein C (SP-C) ELISA kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of mouse SP-C in serum, plasma, cell culture supernates, or tissue homogenates. This assay uses the sandwich enzyme immunoassay technique in combination with the enzyme-substrate chromogenic reaction to quantify the analyte in the sample. The color develops positively to the amount of SP-C in samples. The color intensity is measured at 450 nm via a microplate reader. SP-C (SFTPC) is expressed only in the lung and is a highly specific marker for

identifying TII cells. SP-C has several functions in pulmonary surfactant, including increasing the adsorption and spreading of phospholipids at the air-liquid interface thereby promoting the surface tension-lowering properties of surfactant, a role in surfactant recycling and homeostasis, and involvement in the modulation of the innate defense system. Mutations in SP-C protein and its total absence can lead to interstitial lung disease.

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 mouse SP-C 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 %	86
	Range %	80-92
1:2	Average %	91
	Range %	85-96
1:4	Average %	95
	Range %	90-100
1:8	Average %	98
	Range %	92-102

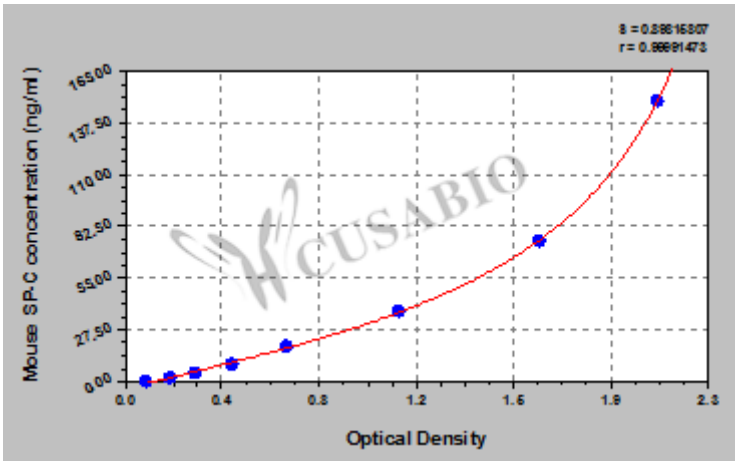
Recovery

The recovery of mouse SP-C 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	88-98
EDTA plasma (n=4)	96	90-100

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
150	2.147	2.052	2.100	2.009
75	1.693	1.576	1.635	1.544
37.5	1.121	1.044	1.083	0.992
18.8	0.648	0.639	0.644	0.553
9.4	0.429	0.424	0.427	0.336
4.7	0.295	0.279	0.287	0.196
2.3	0.194	0.179	0.187	0.096
0	0.092	0.090	0.091	?

Msds

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