



Human Protein S ELISA Kit

Product Code	CSB-E09903h
Abbreviation	PROS1
Target Name	Protein S
Uniprot No.	P07225
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	3.12 ng/mL-200 ng/mL
Sensitivity	0.78 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	Cardiovascular
Gene Names	PROS1
Tag Info	quantitative
Protein Description	Sandwich

Description

The human Protein S ELISA kit offers a robust and sensitive tool for quantifying Protein S levels in various human samples, including serum, plasma, and tissue homogenates. It provides a detection range of 3.12 ng/mL to 200 ng/mL with a sensitivity of 0.78 ng/mL. The assay principle is based on a sandwich method, utilizing a detection wavelength of 450 nm. The assay time ranges from 1 to 5 hours, requiring a sample volume of 50-100 µl. The kit's sensitivity and wide detection range make it suitable for various experimental applications. The sandwich assay principle ensures precise measurement of Protein S, contributing to the kit's reliability. The use of this ELISA kit can aid in studying conditions such as diabetes and obesity, where Protein S levels are significantly altered and correlated with metabolic markers [1].

References:

[1] L. Scheffler, A. Crane, H. Heyne, A. Tönjes, D. Schleinitz, C. Ihling et al., "Widely used commercial elisa does not detect precursor of haptoglobin2, but recognizes properdin as a potential second member of the zonulin family", *Frontiers in Endocrinology*, vol. 9, 2018.
<https://doi.org/10.3389/fendo.2018.00022>



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 Protein S 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)
1:100	Average %	91
	Range %	87-95
1:200	Average %	95
	Range %	90-100
1:400	Average %	97
	Range %	94-101
1:800	Average %	94
	Range %	91-98

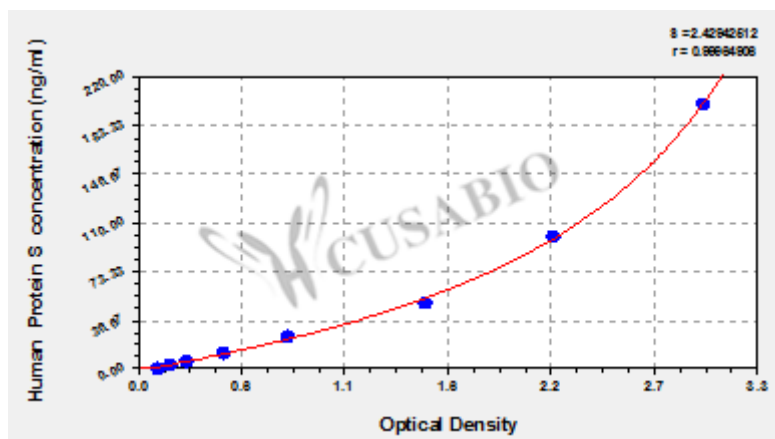
Recovery

The recovery of human Protein S 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)	90	87-94
EDTA plasma (n=4)	99	93-105

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
200	2.955	3.003	2.979	2.874
100	2.134	2.254	2.194	2.089
50	1.460	1.568	1.514	1.409
25	0.788	0.792	0.790	0.685
12.5	0.436	0.469	0.453	0.348
6.25	0.265	0.254	0.260	0.155
3.12	0.177	0.166	0.172	0.067
0	0.101	0.109	0.105	

Msds

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