

# **Human Serum Albumin (HSA) ELISA Kit**

Catalog Number	LDG00031E
Package	96 T (8 x 12 strips) / Customized package

For full product information, images and publications, please visit our website.



#### **Overview**

#### Description

HSA is the most abundant protein in blood, playing a crucial role in maintaining colloid osmotic pressure, transporting various molecules (such as fatty acids, hormones, drugs, etc.), and exerting antioxidant effects. Furthermore, during the production of biopharmaceutical products, HSA may be introduced due to its widespread applications (for example, as a stabilizer and excipient). Monitoring and controlling the residual amount of HSA is essential for ensuring the safety, efficacy, and regulatory compliance of these products. Leadgene® Human serum albumin ELISA Kit is an enzyme-linked immunosorbent assay (ELISA) for the quantitative detection of HSA level in sample solution. The Human serum albumin ELISA Kit is for research use only (RUO). Not suitable for use in diagnostic or therapeutic procedures.

#### **Test Principle**

Human serum albumin (HSA) ELISA Kit is used to detect HSA in samples by sandwich ELISA method. This assay uses microplate pre-coated with mouse anti-HSA monoclonal antibody to the solid phase. HSA in the samples conjugates on solid phase and then react with the HRP conjugated anti-HSA VHH antibody. Subsequent wash steps will residual unbound antibody. After incubation with substrate solution, the reaction is determined by the absorbance at 450 nm. Quantification of HSA level is accomplished by comparing the absorbance with standard curve.

### **Specifications**

Reactivity

Human Serum Albumin (HSA)

Conjugation

HRP

**Specificity** 

Human Serum Albumin (HSA)

**Application** 

Sandwich ELISA analysis

Sensitivity

Limit of detection (LoD): 0.486 ng/mL. Limit of quantification (LoQ): 1.622 ng/mL.

**Assay Range** 

1.95 ng/mL-125 ng/mL

**Tainan Headquarter** 

**Innovation & Research Center** 

**CLD Center** 



Sample Type

Samples contain human serum albumin

Linearity

N/A

Recovery

N/A

# Background

#### **Synonyms**

HSA, human serum albumin, albumin detection, quantitative ELISA, nephropathy biomarker, proteinuria, diagnostic assay, kidney function marker

## Instruction

## **Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at 2-8°C for long term storage.

## Stability & Storage

This product is stable after storage at:

2-8°C for unopened product.

Please refer to product manual for storage constructions.

## **Image**



Standard	Human serum albumin (HSA) (ng/mL)		
1	125	1.103	1.118
2	62.5	0.729	0.766
G 13 VIII	31.25 ADGENE	0.405	0.422
4	15.63	0.2	0.174
5	7.81	0.148	0.141
6	3.91	0.11	0.112
7	1.95	0.098	0.09
Blank	LEADGENE <sup>0</sup>	0.067	0.07
1.5	R <sup>2</sup> =0.99	99	
1.0-	QUEADGENE		

l ypical data.
The following data are for
demonstration only.

	1	2	3	1.4
A	Standard 1 (125 ng/mL)	Standard 1 (125 ng/mL)	Sample 1	Sample 5
В	Standard 2 (62.5 ng/mL)	Standard 2 (62.5 ng/mL)	Sample 1	Sample 5
С	Standard 3 (31.25 ng/mL)	Standard 3 (31.25 ng/mL)	Sample 2	Sample 6
D (()	Standard 4 (15.63 ng/mL)	Standard 4 (15.63 ng/mL)	Sample 2	Sample 6
E	Standard 5 (7.81 ng/mL)	Standard 5 (7.81 ng/mL)	Sample 3	Sample 7
F	Standard 6 (3.91 ng/mL)	Standard 6 (3.91 ng/mL)	Sample 3	Sample 7
VD (GENE	Standard 7 (1.95 ng/mL)	Standard 7 (1.95 ng/mL)	Sample 4	Sample 8
н	Blank	Blank	Sample 4	Sample 8

An example of orientation of standards, blanks and samples in the stripwells microplate.

Human serum albumin (HSA) ELISA plate Stripwell microplate with 96 anti-human serum albumin monoclonal antibodies coated wells	96 wells (12 x 8-well strips)	Ready for use
Standard Human serum albumin (HSA) lyophilized from buffered protein solution with preservatives	2 vials (Lyophilized form)	Refer to the vial label for reconstitution volume. Reconstitute by adding Standard reconstitution buffer to be a stock solution of 625 ng/mL (see procedure, section 8.(2))
Standard reconstitution buffer Buffered protein solution with preservatives	2 vials (1.1 mL)	Ready for use
Standard & sample diluent buffer Buffered protein solution with preservatives	1 vial (12 mL)	Ready for use
HRP-antibody conjugate HRP conjugated anti-human serum albumin (HSA) monoclonal antibody in buffered protein solution with preservatives	1 vial (70 μL)	Dilute 200 x with HRP-antibody conjugated diluent buffer (see reagent preparation, section 5.A)
HRP-antibody conjugated diluent buffer Buffered solution with preservatives	1 vial (12 mL)	Ready for use
20 X wash buffer 20-fold concentrated solution of buffered surfactant with preservatives	1 vial (15 mL)	Dilute 20 x with distilled water (see reagent preparation, section 5.8)
TMB Chromogenic substrate (tetramethylbenzidine) for HRP	1 vial (12 mL)	Ready for use
Stop solution H <sub>2</sub> SO <sub>4</sub> solution	1 vial (6 mL)	Ready for use
Microplate sealing film	2 sheet	N/A

Reagents provided and reconstitution.

**Disclaimer:** For Research Use or Further Manufacturing Only.