



Human High mobility group protein B1, HMGB-1 ELISA Kit

Product Code	CSB-E08223h
Abbreviation	HMGB1
Target Name	high-mobility group box 1
Uniprot No.	P09429
Alias	DKFZp686A04236, HMG1, HMG3, SBP-1, Amphoterin OTTHUMP00000018196 OTTHUMP00000190860 OTTHUMP00000200117 Sulfoglucuronyl carbohydrate binding protein high mobility group box 1 high mobility group prot
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	78 pg/mL-5000 pg/mL
Sensitivity	19.5 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
Quality Control	<p>A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm.</p> <p>An incubator that can provide stable incubation conditions up to 37°C±5°C.</p> <p>Centrifuge</p> <p>Vortex</p> <p>Squirt bottle, manifold dispenser, or automated microplate washer</p> <p>Absorbent paper for blotting the microtiter plate</p> <p>50-300ul multi-channel micropipette</p> <p>Pipette tips</p> <p>Single-channel micropipette with different ranges</p> <p>100ml and 500ml graduated cylinders</p> <p>Deionized or distilled water</p> <p>Timer</p> <p>Test tubes for dilution</p>
Gene Names	HMGB1
Tag Info	quantitative



Protein Description

Sandwich

Component

A micro ELISA plate --- The 96-well plate has been pre-coated with anti-human HMGB1 antibody. This dismountable microplate can be divided into 12 x 8 strip plates.

Two vials lyophilized standard --- Dilute a bottle of standard at dilution series, read the OD values, and then draw a standard curve.

One vial Biotin-labeled HMGB1 antibody (100 x concentrate) (120 µl/bottle) --- Act as the detection antibody.

One vial HRP-avidin (100 x concentrate) (120 µl/bottle) --- Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.

One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the high concentration Biotin-antibody to an appropriate working solution.

One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the high concentration HRP-avidin solution to an appropriate solution.

One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration.

One vial Wash Buffer (25 x concentrate) (20 ml/bottle) --- Wash away unbound or free substances.

One vial TMB Substrate (10 ml/bottle) --- Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.

One vial Stop Solution (10 ml/bottle) --- Stop the color reaction. The solution color immediately turns from blue to yellow.

Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation. An instruction manual

Description

This Human HMGB1 ELISA Kit was designed for the quantitative measurement of Human HMGB1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 78 pg/mL-5000 pg/mL and the sensitivity is 19.5 pg/mL.

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 HMGB-1 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 %	90
	Range %	84-99
1:2	Average %	88
	Range %	82-94



1:4	Average %	95
	Range %	89-102
1:8	Average %	94
	Range %	88-100

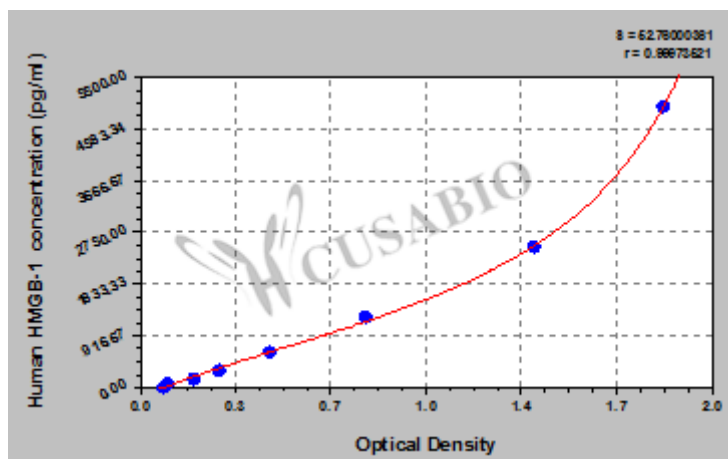
Recovery

The recovery of human HMGB-1 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)	98	90-102
EDTA plasma (n=4)	91	85-100

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
5000	1.912	1.831	1.872	1.780
2500	1.454	1.369	1.412	1.320
1250	0.839	0.789	0.814	0.722
625	0.456	0.487	0.472	0.380
312	0.283	0.297	0.290	0.198
156	0.199	0.202	0.201	0.109
78	0.103	0.108	0.106	0.014
0	0.089	0.094	0.092	?

Msds

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