



# Human Heat Shock Protein 70,HSP-70 ELISA Kit

<b>Product Code</b>	CSB-E08297h
<b>Abbreviation</b>	HSPA1B
<b>Protein Biological Process 1</b>	Neurobiology
<b>Target Name</b>	heat shock 70kDa protein 1B
<b>Uniprot No.</b>	P0DMV9
<b>Alias</b>	DAAP-21F2.7, FLJ54328, HSP70-1B, HSP70-2, HSPA1A, heat shock 70kD protein 1B
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Protein Biological Process 3</b>	Stress response
<b>Sample Types</b>	serum, plasma, tissue homogenates
<b>Detection Range</b>	1.56 ng/mL-100 ng/mL
<b>Sensitivity</b>	0.39 ng/mL
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Neuroscience
<b>Quality Control</b>	<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 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>
<b>Gene Names</b>	HSPA1B
<b>Tag Info</b>	quantitative



Protein Description	Sandwich			
Component	<p>A micro ELISA plate ---The 96-well plate has been pre-coated with an anti-human HSP70 antibody. This dismountable microplate can be divided into 12 x 8 strip plates.</p> <p>Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.</p> <p>One vial Biotin-labeled HSP70 antibody (100 x concentrate) (120 μl/bottle) ---Act as the detection antibody.</p> <p>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.</p> <p>One vial Biotin-antibodyDiluent (15 ml/bottle) ---Dilute the Biotin-antibody.</p> <p>One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution.</p> <p>One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration.</p> <p>One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances.</p> <p>One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.</p> <p>One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.</p> <p>Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation.</p> <p>An instruction manual</p>			
Description	<p>This Human HSPA1B ELISA Kit was designed for the quantitative measurement of Human HSPA1B protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 1.56 ng/mL-100 ng/mL and the sensitivity is 0.39 ng/mL.</p>			
Target Details	<p>This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins.</p>			
Product Precision	<p>Intra-assay Precision (Precision within an assay): CV%&lt;8%</p> <p>Three samples of known concentration were tested twenty times on one plate to assess.</p> <p>Inter-assay Precision (Precision between assays): CV%&lt;10%</p> <p>Three samples of known concentration were tested in twenty assays to assess.</p>			
Linearity	<p>To assess the linearity of the assay, samples were spiked with high concentrations of human HSP-70 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.</p> <table><tr><td>?</td><td>Sample</td><td>Serum(n=4)</td></tr></table>	?	Sample	Serum(n=4)
?	Sample	Serum(n=4)		



1:1	Average %	96
	Range %	85-100
1:2	Average %	87
	Range %	82-93
1:4	Average %	98
	Range %	95-100
1:8	Average %	92
	Range %	88-94

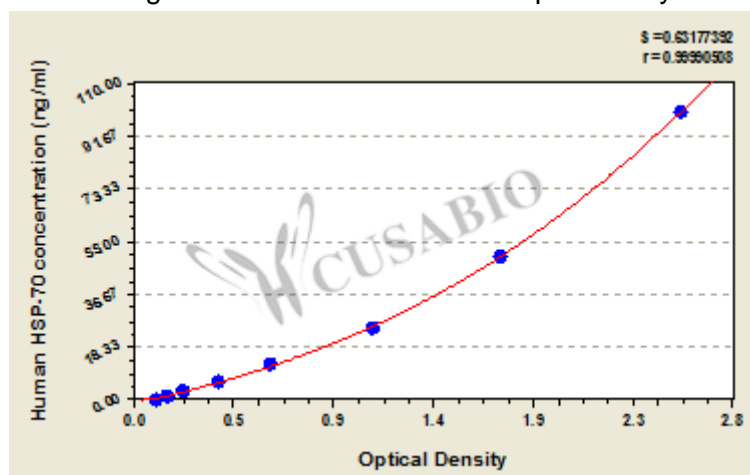
## Recovery

The recovery of human HSP-70 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)	100	95-106
EDTA plasma (n=4)	92	87-96

## 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
100	2.588	2.521	2.555	2.445
50	1.745	1.676	1.711	1.601
25	1.133	1.112	1.123	1.013
12.5	0.667	0.621	0.644	0.534
6.25	0.401	0.399	0.400	0.290
3.12	0.238	0.233	0.236	0.126
1.56	0.167	0.159	0.163	0.053
0	0.112	0.108	0.110	?

## Msds

{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E08297h.pdf","filename":"MSDS"}}