Human Haptoglobin,Hpt/HP ELISA KIT

Product Code	CSB-E08584h
Abbreviation	HP
Protein Biological Process 1	Cardiovascular
Target Name	haptoglobin
Uniprot No.	P00738
Alias	BP, HP2-ALPHA-2, HPA1S, MGC111141, binding peptide|haptoglobin alpha(1S)-beta|haptoglobin alpha(2FS)-beta|haptoglobin, alpha polypeptide|haptoglobin, beta polypeptide
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, urine
Detection Range	1.563 ng/mL-100 ng/mL
Sensitivity	1.044 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
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	HP
Tag Info	quantitative
Protein Description	Sandwich

Component	A micro ELISA plate---The 96-well plate has been pre-coated with an anti-human HP antibody. One vial standard (1 x 100 µl) ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve. One vial HRP-conjugated HP antibody (100 x concentrate) (120 µl/bottle) ---Bind to the HP in the samples or standards and react with the substrate to make the solution chromogenic. Two vials Sample Diluent (20 ml/bottle) ---Dilute the sample solution. One vial Wash Buffer (25x concentrate) (20ml/bottle) ---Wash away unbound or free substances. TMB Substrate (1 x 10 ml) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue. One vial Stop Solution (10ml/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 Haptoglobin (HP) ELISA Kit was designed for the quantitative measurement of Human Haptoglobin (HP) protein in serum, plasma, urine. It is a Sandwich ELISA kit, its detection range is 1.563 ng/mL-100 ng/mL and the sensitivity is 1.044 ng/mL.
Target Details	This gene encodes a preproprotein, which is processed to yield both alpha and beta chains, which subsequently combine as a tetramer to produce haptoglobin. Haptoglobin functions to bind free plasma hemoglobin, which allows degradative enzymes to gain access to the hemoglobin, while at the same time preventing loss of iron through the kidneys and protecting the kidneys from damage by hemoglobin. Mutations in this gene and/or its regulatory regions cause ahaptoglobinemia or hypohaptoglobinemia. This gene has also been linked to diabetic nephropathy, the incidence of coronary artery disease in type 1 diabetes, Crohn s disease, inflammatory disease behavior, primary sclerosing cholangitis, susceptibility to idiopathic Parkinson s disease, and a reduced incidence of Plasmodium falciparum malaria. A similar duplicated gene is located next to this gene on chromosome 16. Multiple transcript variants encoding different isoforms have been found for this gene.
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.

	Intra-Assay Precision			Inter-Assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	20	20	20
Mean(ng/ml)	12.539	13.044	12.518	12.933	13.589	12.178
SD	0.089	0.073	0.050	0.098	0.089	0.090
CV(%)	7.956	6.392	4.472	8.617	7.634	8.169

Linearity

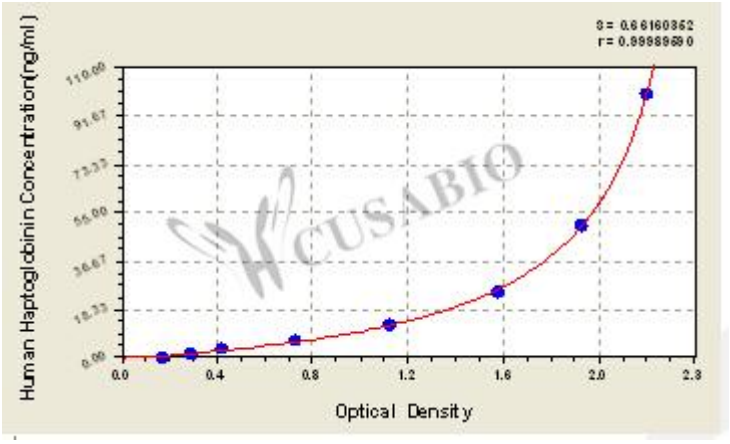
To assess the linearity of the assay, samples were spiked with high concentrations of human Haptoglobin various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

	Sample	Serum(n=4)
1:5000	Average %	95
	Range %	85-107
1:10000	Average %	92
	Range %	88-104
1:20000	Average %	91
	Range %	85-99
1:40000	Average %	97
	Range %	90-111

	Sample	Urine(n=4)
1:1	Average %	92
	Range %	83-102
1:2	Average %	95
	Range %	91-100
1:4	Average %	96
	Range %	85-105
1:8	Average %	99
	Range %	93-114

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
0	0.190	0.179	0.185	
1.563	0.316	0.285	0.301	0.116
3.125	0.429	0.416	0.423	0.238
6.25	0.715	0.727	0.721	0.536
12.5	1.141	1.068	1.105	0.920
25	1.589	1.501	1.545	1.360
50	1.890	1.877	1.884	1.699
100	2.188	2.114	2.151	1.966

Msds

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