Human ATP synthase lipid-binding protein, mitochondrial(ATP5G1) ELISA kit

Product Code	CSB-EL002359HU
Protein Biological Process 2	Anion transport
Abbreviation	ATP5G1
Protein Biological Process 1	Transport
Target Name	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit C1 (subunit 9)
Uniprot No.	P05496
Alias	ATP5A, ATP5G, ATP synthase lipid-binding protein, mitochondrial|ATP synthase proteolipid P1|ATP synthase, H+ transporting, mitochondrial F0 complex, subunit C1|ATP synthase, H+ transporting, mitocho
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Hydrogen ion transport
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	23.5 pg/mL-1500 pg/mL
Sensitivity	5.86 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	Signal Transduction
Gene Names	ATP5G1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human ATP5G1 ELISA Kit was designed for the quantitative measurement of Human ATP5G1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 23.5 pg/mL-1500 pg/mL and the sensitivity is 5.86 pg/mL .

Target Details

This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene is one of three genes that encode subunit c of the proton channel. Each of the three genes have distinct mitochondrial import sequences but encode the identical mature protein. Alternatively spliced transcript variants encoding the same protein have been identified.

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 ATP5G1 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 %	89
	Range %	86-92
1:2	Average %	94
	Range %	89-98
1:4	Average %	89
	Range %	85-93
1:8	Average %	95
	Range %	91-99

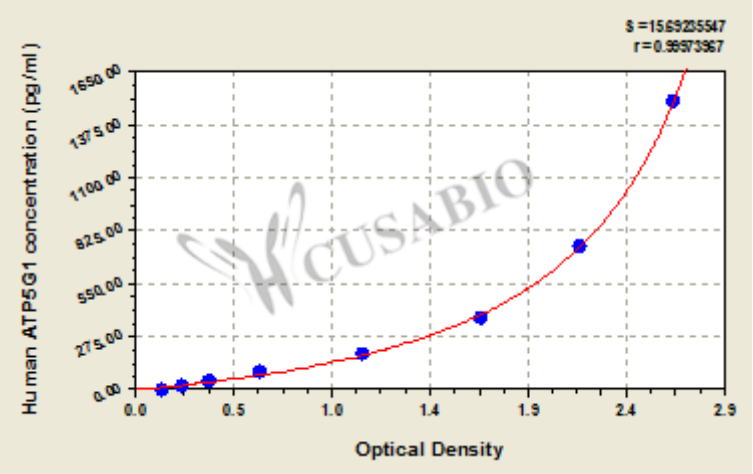
Recovery

The recovery of human ATP5G1 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)	95	91-97
EDTA plasma (n=4)	94	90-98

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
1500	2.637	2.612	2.625	2.480
750	2.215	2.118	2.167	2.022
375	1.697	1.683	1.690	1.545
187.5	1.107	1.118	1.113	0.968
94	0.611	0.621	0.616	0.471
47	0.365	0.372	0.369	0.224
23.5	0.242	0.231	0.237	0.092
0	0.146	0.144	0.145	?

Msds

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