Human Lysosomal alpha-glucosidase(GAA) ELISA kit

Product Code	CSB-EL009125HU
Abbreviation	GAA
Target Name	glucosidase, alpha; acid
Uniprot No.	P10253
Alias	LYAG, acid alpha-glucosidase|acid maltase|lysosomal alpha-glucosidase
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	25 pg/mL-1600 pg/mL
Sensitivity	6.25 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	Metabolism
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 600 nm or 630 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	GAA
Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate ---The 96-well plate has been pre-coated with an anti-human GAA antibody.

Six vials standard (5 ml/bottle) ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.
One vial HRP-conjugated GAA antibody (6 ml/bottle) ---Bind to the MSTN in the samples or standards and react with the substrate to make the solution chromogenic.
Substrate A (1 x 7 ml)
Substrate B (1 x 7 ml)
One vial Stop Solution (7ml/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 GAA ELISA Kit was designed for the quantitative measurement of Human GAA protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 25 pg/mL-1600 pg/mL and the sensitivity is 6.25 pg/mL.

Target Details

This gene encodes acid alpha-glucosidase, which is essential for the degradation of glycogen to glucose in lysosomes. Different forms of acid alpha-glucosidase are obtained by proteolytic processing. Defects in this gene are the cause of glycogen storage disease II, also known as Pompe s disease, which is an autosomal recessive disorder with a broad clinical spectrum. Three transcript variants encoding the same protein 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.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human GAA 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 %	94
	Range %	91-97
1:2	Average %	84
	Range %	81-89
1:4	Average %	99
	Range %	95-104
1:8	Average %	93
	Range %	90-96

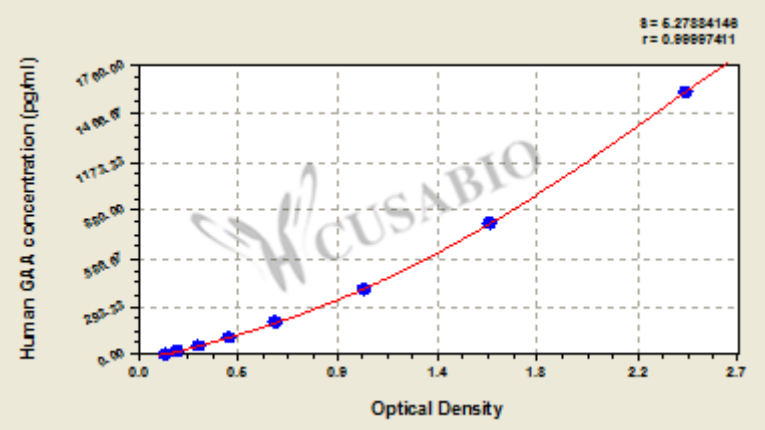
Recovery

The recovery of human GAA 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)	87	83-90
EDTA plasma (n=4)	86	83-89

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
1600	2.364	2.547	2.456	2.323
800	1.596	1.568	1.582	1.449
400	1.001	1.035	1.018	0.885
200	0.612	0.634	0.623	0.490
100	0.413	0.416	0.415	0.282
50	0.288	0.276	0.282	0.149
25	0.197	0.173	0.185	0.052
0	0.131	0.135	0.133	

Msds

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