Human glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2) ELISA kit

Product Code	CSB-E17834h
Abbreviation	GOT2
Protein Biological Process 1	Transport
Target Name	glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2)
Uniprot No.	P00505
Alias	FLJ40994, KAT4, KATIV, mitAAT, aspartate aminotransferase 2|kynurenine aminotransferase IV
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Lipid transport
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.156 mU/mL-10 mU/mL
Sensitivity	0.039 mU/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	GOT2
Tag Info	quantitative
Protein Description	Sandwich
Description	The human GOT2 ELISA Kit is engineered for accurate measurement of human GOT2 levels from samples including serum, plasma, or tissue homogenates. It uses the Sandwich-ELISA mechanism in combination with the enzyme-substrate chromogenic reaction to measure the human GOT2 content in the sample. The color intensity is positively correlated with GOT2 content in the sample. This kit has been validated against standards of sensitivity, specificity, precision, linearity, recovery, and lot-to-lot consistency.

GOT2 is a mitochondrial glutamate oxaloacetate transaminase that catalyzes the irreversible transamination of the L-tryptophan metabolite L-kynurenine to form kynurenic acid (KA). It facilitates the cellular uptake of long-chain free fatty acids. GOT2 plays a key role in amino acid metabolism, intracellular NAD(H) redox balance, as well as metabolite exchange between mitochondria and cytosol. Studies have shown that loss of GOT2 disturbs redox homeostasis and halts the proliferation of pancreatic ductal adenocarcinoma (PDA) cells in vitro.

Target Details

Glutamic-oxaloacetic transaminase is a pyridoxal phosphate-dependent enzyme which exists in cytoplasmic and inner-membrane mitochondrial forms, GOT1 and GOT2, respectively. GOT plays a role in amino acid metabolism and the urea and tricarboxylic acid cycles. The two enzymes are homodimeric and show close homology.

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 GOT2 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 %	85
	Range %	80-89
1:2	Average %	92
	Range %	88-97
1:4	Average %	96
	Range %	91-100
1:8	Average %	87
	Range %	82-91

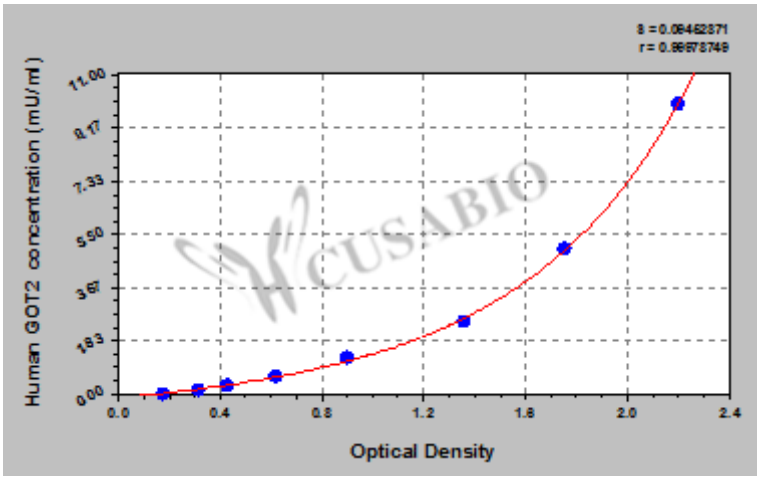
Recovery

The recovery of human GOT2 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)	103	98-109
EDTA plasma (n=4)	95	90-100

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



mU/ml	OD1	OD2	Average	Corrected
10	2.186	2.268	2.227	2.028
5	1.765	1.794	1.780	1.581
2.5	1.391	1.380	1.386	1.187
1.25	0.928	0.911	0.920	0.721
0.625	0.654	0.623	0.639	0.440
0.312	0.439	0.459	0.449	0.250
0.156	0.327	0.341	0.334	0.135
0	0.202	0.195	0.199	?

Msds

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