



Human Phospholipidase A2,PLA2 ELISA Kit

Product Code	CSB-E08110h
Protein Biological Process 2	Lipogenesis and lipometabolism
Abbreviation	PLA2G1B
Protein Biological Process 1	Biosynthesis/Metabolism
Target Name	phospholipase A2, group IB (pancreas)
Uniprot No.	P04054
Alias	MGC119834, MGC119835, PLA2, PLA2A, PPLA2, phosphatidylcholine 2-acylhydrolase phospholipase A2 group IB
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Lipid degradation
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.45 ng/mL-30 ng/mL
Sensitivity	0.11 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	Metabolism
Gene Names	PLA2G1B
Tag Info	quantitative
Protein Description	Sandwich

Description

This human phospholipidase A2 (PLA2) ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of human PLA2 in different samples, including serum, plasma, or tissue homogenates. The enzyme-substrate chromogenic reaction is also used to amplify the signal and quantify the levels of the analyte through the intensity of the colored product. The color intensity positively correlates with the amount of PLA2 bound in the initial step.

PLA2 plays key roles in multiple cellular responses, including phospholipid



digestion & metabolism, host defense, and signal transduction. PLA2 catalyzes the hydrolysis of the sn-2 position of membrane glycerophospholipids to liberate arachidonic acid (AA), a precursor of eicosanoids including prostaglandins and leukotrienes. PLA2 is a key enzyme in the regulation of lipid mediators of the inflammatory process. Evidence has shown that PLA2 is involved in all stages of pathogen encounter, from the initial signaling to the uptake, degradation, and presentation of the antigen.

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 PLA2 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)
1:5	Average %	93
	Range %	88-97
1:10	Average %	104
	Range %	100-109
1:20	Average %	95
	Range %	91-99
1:40	Average %	85
	Range %	81-92

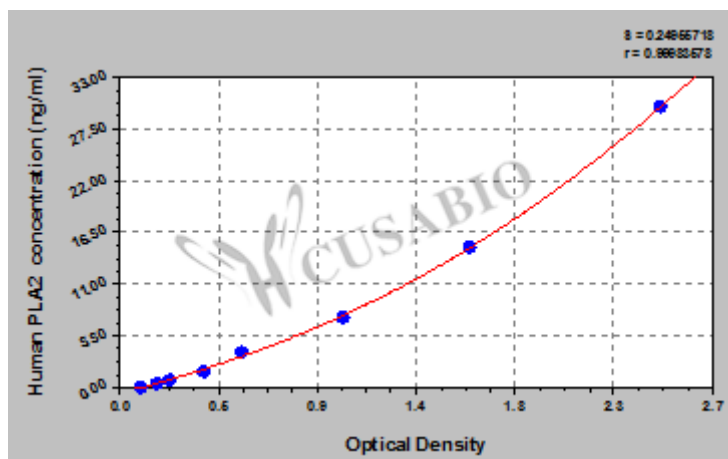
Recovery

The recovery of human PLA2 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)	92	88-96
EDTA plasma (n=4)	97	93-101

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
30	2.534	2.452	2.493	2.384
15	1.652	1.576	1.614	1.505
7.5	1.066	1.004	1.035	0.926
3.75	0.578	0.561	0.570	0.461
1.8	0.387	0.401	0.394	0.285
0.9	0.238	0.245	0.242	0.133
0.45	0.179	0.187	0.183	0.074
0	0.105	0.112	0.109	?

Msds

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