



Rat Lecithin Cholesterol Acyltransferase(LCAT) ELISA Kit

Product Code	CSB-E14201r
Protein Biological Process 2	Lipogenesis and lipometabolism
Abbreviation	LCAT
Protein Biological Process 1	Biosynthesis/Metabolism
Target Name	lecithin-cholesterol acyltransferase
Uniprot No.	P18424
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Cholesterol metabolism
Sample Types	serum, plasma, tissue homogenates
Detection Range	1.87 ng/mL-120 ng/mL
Sensitivity	0.94 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	Lcat
Tag Info	quantitative
Protein Description	Competitive
Description	This Rat LCAT ELISA Kit was designed for the quantitative measurement of Rat LCAT protein in serum, plasma, tissue homogenates. It is a Competitive ELISA kit, its detection range is 1.87 ng/mL-120 ng/mL and the sensitivity is 0.94 ng/mL.
Target Details	This gene encodes the extracellular cholesterol esterifying enzyme, lecithin-cholesterol acyltransferase. The esterification of cholesterol is required for cholesterol transport. Mutations in this gene have been found to cause fish-eye disease as well as LCAT deficiency.



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 rat LCAT 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)
1:100	Average %	102
	Range %	92-107
1:200	Average %	88
	Range %	84-93
1:400	Average %	101
	Range %	94-105
1:800	Average %	102
	Range %	92-105

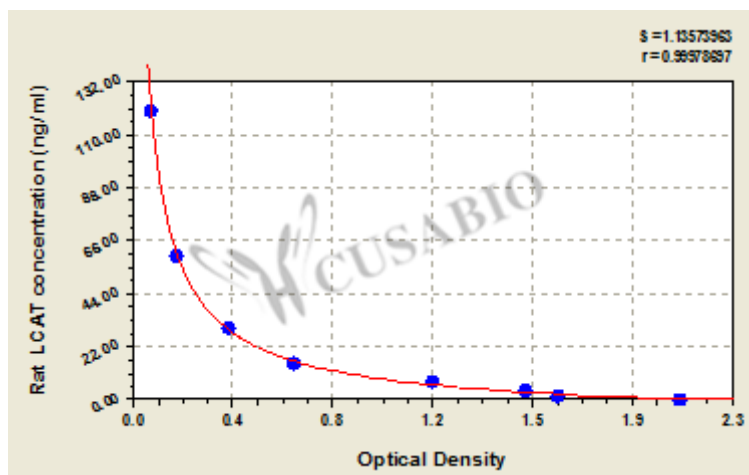
Recovery

The recovery of rat LCAT 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)	90	85-96
EDTA plasma (n=4)	102	92-107

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
120	0.075	0.079	0.077
60	0.172	0.178	0.175
30	0.374	0.382	0.378
15	0.634	0.624	0.629
7.5	1.178	1.146	1.162
3.75	1.504	1.533	1.519
1.87	1.673	1.622	1.648
0	2.155	2.078	2.117