

# Rat Lecithin Cholesterol Acyltransferase (LCAT) ELISA Kit

Catalog No: #EK10145

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Package Size: #EK10145-1 48T #EK10145-2 96T

## Description

Product Name	Rat Lecithin Cholesterol Acyltransferase (LCAT) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	Phosphatidylcholine-sterol acyltransferase
Accession No.	P53761
Uniprot	P53761
GeneID	100008978;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## Application Details

Detect Range:0.31 ng/mL - 20 ng/mL

Sensitivity:28.7 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 &amp;mu;L

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

Detection Method:Sandwich

**Test principle:**This assay employs a two-site sandwich ELISA to quantitate LCAT in samples. An antibody specific for LCAT has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyLCAT present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for LCAT is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of LCAT bound in the initial step. The color development is stopped and the intensity of the color is measured.

**Product Overview:**Lecithin-cholesterol acyltransferase is an enzyme that converts free cholesterol into cholesteryl ester (a more hydrophobic form of cholesterol), which is then sequestered into the core of a lipoprotein particle, eventually making the newly synthesized HDL spherical and forcing the reaction to become unidirectional since the particles are removed from the surface. The enzyme is bound to high-density lipoproteins (HDLs) and low-density lipoproteins in the blood plasma. An unusual feature of the message is that the poly(A) signal appears to overlap the COOH-terminal glutamic acid and stop codons. The protein has several extended sequences of hydrophobic amino acids, one of which is similar to sequences in pancreatic lipase and lingual lipase.

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Note: This product is for in vitro research use only