

## Product Data Sheet

## LCAT Protein, Mouse (HEK293, His)

Cat. No.:	HY-P77979
Synonyms:	PAF acetylhydrolase; LCAT
Species:	Mouse
Source:	HEK293
Accession:	P16301 (F25-E438)
Gene ID:	16816
Molecular Weight:	67-75 kDa

DDODEDTIES	
PROPERTIES	
<b>Biological Activity</b>	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Solution.
Formulation	Supplied as a 0.22 $\mu m$ filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

## DESCRIPTION

Background	The LCAT protein is a central enzyme involved in the extracellular metabolism of plasma lipoproteins. It is primarily
	synthesized in the liver and secreted into the bloodstream, where it converts cholesterol and phosphatidylcholines to
	cholesteryl esters and lysophosphatidylcholines on the surface of high and low density lipoproteins (HDLs and LDLs). This
	process facilitates the transport of cholesterol esters back to the liver. In addition to its hepatic production, LCAT is also
	produced in the brain by primary astrocytes. In the brain, it esterifies free cholesterol on nascent APOE-containing
	lipoproteins secreted from glia, influencing cerebral spinal fluid (CSF) APOE- and APOA1 levels. Together with APOE and the
	cholesterol transporter ABCA1, LCAT plays a crucial role in the maturation of glial-derived, nascent lipoproteins.
	Furthermore, LCAT is responsible for remodeling high-density lipoprotein particles into their spherical forms. It exhibits a
	preference for specific phosphatidylcholines in the plasma and can also catalyze the hydrolysis of platelet-activating factor
	(PAF) and transfer of the acetate group from PAF to another molecule. Additionally, LCAT catalyzes the esterification of
	(24S)-hydroxycholesterol to produce 24(S)OH-C monoesters.

## Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA