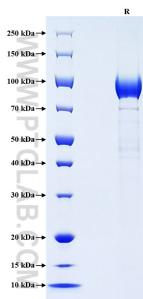


Catalog Number: Eg2756

Basic Information	Species: Mouse	Purity: >90 %, SDS-PAGE	Tag: rFc Tag
<b>Technical Specifications</b>	<b>Purity:</b> >90 %, SDS-PAGE <b>Endotoxin Level:</b> <0.1 EU/ µg protein, LAL method <b>Source:</b> HEK293-derived Mouse LCAT protein Phe25-Glu438 (Accession# P16301) with a rabbit IgG Fc tag at the C-terminus. <b>GenelD:</b> 16816 <b>Accession:</b> P16301 <b>Predicted Molecular Mass:</b> 73.3 kDa <b>SDS-PAGE:</b> 80-110 kDa, reducing (R) conditions <b>Formulation:</b> Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.		
<b>Biological Activity</b>	Not tested		
<b>Storage and Shipping</b>	<b>Storage:</b> It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>Until expiry date, -20°C to -80°C as lyophilized proteins.</li> <li>3 months, -20°C to -80°C under sterile conditions after reconstitution.</li> </ul> <b>Shipping:</b> The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.		
<b>Reconstitution</b>	Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.		
<b>Background</b>	Lecithin-cholesterolacyltransferase (LCAT) is an enzyme that acts as a catalyst in plasma, is synthesized by the liver and released into the bloodstream, and exists either free or bound to lipoproteins. The main function of LCAT is to transfer unsaturated fatty acids at the C2 position of HDL lecithin to free cholesterol to generate hemolytic lecithin and cholestryler esters. The main function of LCAT is to transfer unsaturated fatty acids from the C2 site of HDL lecithin to free cholesterol, resulting in the production of hemolysed lecithin and cholestryler esters, which are catalyzed by LCAT in almost 70-80% of plasma cholesterol. Reduced or complete lack of normal function of LCAT leads to two autosomal recessive disorders, familial LCAT deficiency and fish-eye disease, respectively. (PMID: 35121343)		
<b>References</b>	1. Yang K, et al. Biomed Pharmacother. 2022;147:112677. 2. Lin X, et al. J Adv Res. 2024;63:187-194. 3. Leal-Gonzalez R, et al. Obstet Med. 2021;14(3):193-196. 4. Mehta R, et al. Lipids Health Dis. 2021;20(1):70.		
<b>Synonyms</b>	1-alkyl-2-acetylglycerophosphocholine esterase, EC:2.3.1.43, EC:3.1.1.47, Lcat, Lecithin-cholesterol acyltransferase		

## Selected Validation Data



Purity of Recombinant Mouse LCAT was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.