

LCAT, 25-440aa, Human, His tag, E.coli

Cat.NO.: TP02786

3th Edition

Synonyms:Phosphatidylcholine-sterol acyltransferase, lecithin-cholesterol acyltransferase, phosphatidylcholine-sterol O-acyltransferase

Description:LCAT (lecithin-cholesterol acyltransferase), also known as phosphatidylcholine-sterol O-acyltransferase, belongs to the AB hydrolase superfamily. LCAT is responsible for the esterification of the free cholesterol of plasma lipoproteins. This enzyme is 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. It is central enzyme in the extracellular metabolism of plasma lipoproteins and required for remodeling high-density lipoprotein particles into their spherical forms. Recombinant human LCAT protein, fused to His-tag at N-terminus, was expressed in E.coli.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Molecular Weight:49.8kDa (441aa)

Sequences:

MGSSHHHHHSSGLVPRGSHMGSHMFVLLNVLFPPHTTPKAELSNHTRPVILVPGCLGNQLEAKLDKPDVVNWM
CYRKTEDEFTIWLDLNMFLPLGVDCWIDNTRVVYNRSSGLVSNAPGVQIRVPGFGKTYSVYLDSSKLAGYLHTLV
QNLVNNGYVRDET VRAAPYDWRLEPGQQEEYRKLGLVEEMHAAYGKPVFLIGHSLGCLHLLYFLLRQPQAWKD
RFIDGFISLGAPWGGSIKPMVLASGDNQGIPIMSSIKLKEEQRITTTSPWMFPSRMAWPEDHVFISTPSFNNTGRDF
QRFFADLHFEEGWYMWLQSRDLLAGLPAPGVEVYCLYGVGLPTPRTYIYDHGFYTPDVGVLVYEDGDDTVATRST
ELCGLWQGRQPQPVHLLPLHGIQHLNMVFSNLTLEHINAILLGAYRQGPPASPTASPEPPPE

Purity:> 95% by HPLC

Concentration:0.5 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.