

Anti-LCAT Reference Antibody (Amgen patent anti-LCAT)

Catalog # APR11442

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P04180
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2SA
Calculated MW	49578

Additional Information

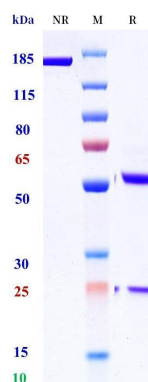
Target/Specificity	LCAT
Expression system	CHO

Protein Information

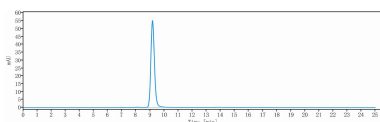
Name	LCAT
Function	Central enzyme in the extracellular metabolism of plasma lipoproteins. Synthesized mainly in the liver and secreted into plasma where it converts cholesterol and phosphatidylcholines (lecithins) to cholesteryl esters and lysophosphatidylcholines on the surface of high and low density lipoproteins (HDLs and LDLs) (PubMed:10329423, PubMed:19065001, PubMed:26195816). The cholesterol ester is then transported back to the liver. Has a preference for plasma 16:0-18:2 or 18:0-18:2 phosphatidylcholines (PubMed:8820107). Also produced in the brain by primary astrocytes, and esterifies free cholesterol on nascent APOE-containing lipoproteins secreted from glia and influences cerebral spinal fluid (CSF) APOE- and APOA1 levels. Together with APOE and the cholesterol transporter ABCA1, plays a key role in the maturation of glial-derived, nascent lipoproteins. Required for remodeling high- density lipoprotein particles into their spherical forms (PubMed:10722751). Catalyzes the hydrolysis of 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine (platelet-activating factor or PAF) to 1-O-alkyl-sn-glycero-3-phosphocholine (lyso-PAF) (PubMed:8016111). Also catalyzes the transfer of the acetate group from PAF to 1-hexadecanoyl-sn-glycero-3-phosphocholine forming lyso-PAF (PubMed:8016111). Catalyzes the esterification of (24S)-hydroxycholesterol (24(S)OH-C), also known as cerebrosterol to produce 24(S)OH-C monoesters (PubMed:24620755).
Cellular Location	Secreted. Note=Secreted into blood plasma (PubMed:10222237, PubMed:3458198, PubMed:8820107) Produced in astrocytes and secreted into cerebral spinal fluid (CSF) (PubMed:10222237).
Tissue Location	Detected in blood plasma (PubMed:10222237, PubMed:3458198,

PubMed:8820107). Detected in cerebral spinal fluid (at protein level)
 (PubMed:10222237). Detected in liver (PubMed:3458198, PubMed:3797244).
 Expressed mainly in brain, liver and testes

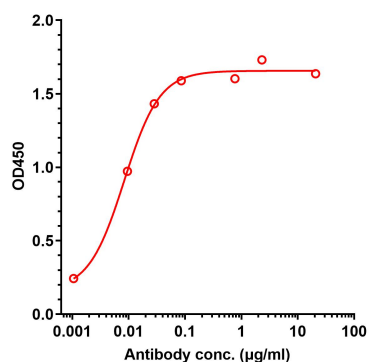
Images



Anti-LCAT Reference Antibody (Amgen patent anti-LCAT) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-LCAT Reference Antibody (Amgen patent anti-LCAT) is 99.58%, determined by SEC-HPLC.



Immobilized hu-LCAT-his at 2 µg/mL can bind Amgen patent anti-LCAT, EC₅₀= 0.008875 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.