

Goat Anti-LCAT Antibody (internal region)

Catalog # AF4306a

Product Information

| Application | WB, E |
|-------------------|--|
| Primary Accession | <u>P04180</u> |
| Other Accession | <u>NP_000220.1</u> , <u>24530</u> , <u>16816</u> , <u>3931</u> |
| Reactivity | Human |
| Predicted | Human |
| Host | Goat |
| Isotype | IgG |
| Calculated MW | 49578 |

Additional Information

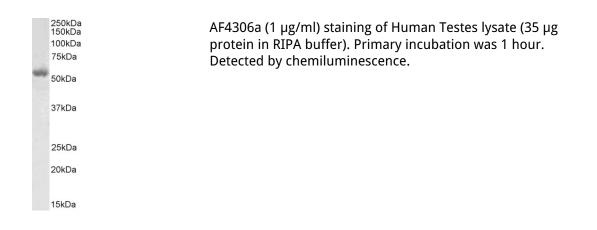
| Gene ID | 3931 |
|-------------|--|
| Other Names | Phosphatidylcholine-sterol acyltransferase, 2.3.1.43, Lecithin-cholesterol acyltransferase, Phospholipid-cholesterol acyltransferase, LCAT |
| Dilution | WB~~1:1000 E~~N/A |
| Storage | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| Precautions | Goat Anti-LCAT Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures. |

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: <u>10329423</u> , PubMed: <u>19065001</u> , PubMed: <u>26195816</u>). 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: <u>8820107</u>). 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: <u>10722751</u>). Catalyzes the hydrolysis of 1-O-alkyl-2-acetyl-sn- |
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| | glycero-3-phosphocholine (platelet-activating factor or PAF) to 1-O- alkyl-sn-glycero-3-phosphocholine (lyso-PAF) (PubMed: <u>8016111</u>). Also catalyzes the transfer of the acetate group from PAF to 1-hexadecanoyl- sn-glycero-3-phosphocholine forming lyso-PAF (PubMed: <u>8016111</u>). Catalyzes the esterification of (24S)-hydroxycholesterol (24(S)OH-C), also known as cerebrosterol to produce 24(S)OH-C monoesters (PubMed: <u>24620755</u>). |
|-------------------|--|
| 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



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