abcam

Product datasheet

Anti-LCAT antibody [EPR1384Y] - Low endotoxin, Azide free ab227112

אילשעבע RabMAb

<u>1 References</u> 画像数 4

製品の概要	
製品名	Anti-LCAT antibody [EPR1384Y] - Low endotoxin, Azide free
製品の詳細	Rabbit monoclonal [EPR1384Y] to LCAT - Low endotoxin, Azide free
由来種	Rabbit
アプリケーション	適用あり: WB, IP, IHC-P
種交差性	交差種: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	IHC-P: Human brain and liver tissue IP: Human plasma
特記事項	ab227112 is the carrier-free version of <u>ab51060</u> .
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.
	Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.
	 This product is a recombinant monoclonal antibody, which offers several advantages including: High batch-to-batch consistency and reproducibility Improved sensitivity and specificity Long-term security of supply Animal-free production For more information <u>see here</u>. Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>. Our <u>Low endotoxin, azide-free formats</u> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.20 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR1384Y
アイソタイプ	lgG

アプリケーション

The Abpromise guarantee

Abpromise保証は、次のテスト済みアプリケーションにおけるab227112の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Detects a band of approximately 62 kDa (predicted molecular weight: 50 kDa).
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols. The immunostaining was performed on a Leica Biosystems BOND [®] RX instrument.

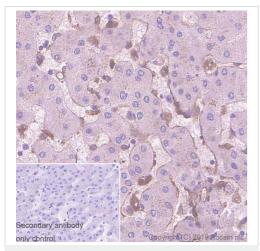
ターゲット情報

機能

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). The cholesterol ester is then transported back to the liver. Has a preference for plasma 16:0-18:2 or 18:O-18:2 phosphatidylcholines. 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.

組織特異性	Expressed mainly in brain, liver and testes. Secreted into plasma and cerebral spinal fluid. In liver, expressed in HEPG2 hepatocytes.
関連疾患	Defects in LCAT are the cause of lecithin-cholesterol acyltransferase deficiency (LCATD) [MIM:245900]; also called Norum disease. LCATD is a disorder of lipoprotein metabolism characterized by inadequate esterification of plasmatic cholesterol. Two clinical forms are recognized: familial LCAT deficiency and fish-eye disease. Familial LCAT deficiency is associated with a complete absence of alpha and beta LCAT activities and results in esterification anomalies involving both HDL (alpha-LCAT activity) and LDL (beta-LCAT activity). It causes a typical triad of diffuse corneal opacities, target cell hemolytic anemia, and proteinuria with renal failure. Defects in LCAT are a cause of fish-eye disease (FED) [MIM:136120]; also known as dyslipoproteinemic corneal dystrophy or alpha-LCAT deficiency. FED is due to a partial LCAT deficiency that affects only alpha-LCAT activity. It is characterized by low plasma HDL and corneal opacities due to accumulation of cholesterol deposits in the cornea ('fish-eye').
配列類似性	Belongs to the AB hydrolase superfamily. Lipase family.
翻訳後修飾	O- and N-glycosylated. O-glycosylation on Thr-431 and Ser-433 consists of sialylated galactose beta 1>3N-acetylgalactosamine structures. N-glycosylated sites contain sialylated triantennary and/or biantennary complex structures.
細胞内局在	Secreted. Secreted into blood plasma. Produced in astrocytes and secreted into cerebral spinal fluid.

画像

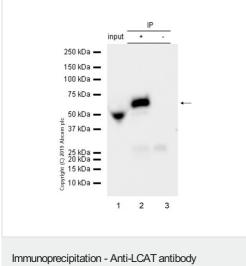


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LCAT antibody [EPR1384Y] - Low endotoxin, Azide free (ab227112)

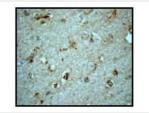
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling LCAT with purified <u>ab51060</u> at 1/100 dilution (1.03 µg/mL). Heat mediated antigen retrieval was performed using Bond[™] Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

The immunostaining was performed on a Leica Biosystems $\mathsf{BOND}^{\textcircled{0}}\mathsf{RX}$ instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab51060</u>)



[EPR1384Y] - Low endotoxin, Azide free (ab227112)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LCAT antibody [EPR1384Y] - Low endotoxin, Azide free (ab227112) <u>ab51060</u> (Purified) at 1/20 dilution (0.5ug) immunoprecipitating
LCAT in Human plasma.
Lane 1 (input): Human plasma 10ug
Lane 2 (+): <u>ab51060</u> & Human plasma
Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab51060</u> in Human plasma
For western blotting, VeriBlot for IP Detection Reagent (HRP)
(<u>ab131366</u>) was used at 1/1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.

50 kDa band in input lane should be human IgG heavy chain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab51060</u>)

ab51060 (unpurified) at 1/100 dilution staining LCAT in paraffin embedded human brain tissue by Immunohistochemistry. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab51060</u>).

Why choose α recombinant antibody? Research with Long-term and confidence scalable supply Consistent and Recombinant reproducible results technology Success from the Ethical standards first experiment compliant Animal-free Confirmed specificity production

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Azide free (ab227112)

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