# abcam

## **Product datasheet**

## Anti-Apolipoprotein E antibody ab24139

## <u>6 References</u> 2 图像

既述		
<sup>立</sup> 品名称	Anti-Apolipoprotein E <b>抗体</b>	
描述	兔多克隆抗体to Apolipoprotein E	
宿主	Rabbit	
经 <b>测</b> 试应 <b>用</b>	适用于: IHC-P, ICC/IF	
种属反应性	与反应: Human	
免疫原	Full length native protein (purified) (Human).	
<b>常</b> 规说 <b>明</b>	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodi and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.	
	If you have any questions, special requirements or concerns, please send us an inquiry and/or	
	contact our Support team ahead of purchase. Recommended alternatives for this product can b found below, along with publications, customer reviews and Q&As	
性能	contact our Support team ahead of purchase. Recommended alternatives for this product can b found below, along with publications, customer reviews and Q&As Liquid	
形式	contact our Support team ahead of purchase. Recommended alternatives for this product can b found below, along with publications, customer reviews and Q&As	
形式 存放说明	contact our Support team ahead of purchase. Recommended alternatives for this product can b found below, along with publications, customer reviews and Q&As Liquid Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -	
形式 存放说明 存储溶液	contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As Liquid Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or 80°C. Avoid freeze / thaw cycle.	
	<ul> <li>contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</li> <li>Liquid</li> <li>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or 80°C. Avoid freeze / thaw cycle.</li> <li>pH: 7.5</li> </ul>	
形式 存放说明 存储溶液 纯度	<ul> <li>contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</li> <li>Liquid</li> <li>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or 80°C. Avoid freeze / thaw cycle.</li> <li>pH: 7.5</li> <li>Ion Exchange Chromatography</li> <li>Pooled antisera are passed over DEAE-cellulose to produce IgG-enriched fraction, which is further subjected to absorption with immobilized human albumin and immmunoglobuline fraction</li> </ul>	

应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/400. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		1/1000.

功能	Mediates the binding, internalization, and catabolism of lipoprotein particles. It can serve as a ligand for the LDL (apo B/E) receptor and for the specific apo-E receptor (chylomicron remnant) of hepatic tissues.
组织 <b>特异性</b>	Occurs in all lipoprotein fractions in plasma. It constitutes 10-20% of very low density lipoproteins (VLDL) and 1-2% of high density lipoproteins (HDL). APOE is produced in most organs. Significant quantities are produced in liver, brain, spleen, lung, adrenal, ovary, kidney and muscle.
疾病相关	Defects in APOE are a cause of hyperlipoproteinemia type 3 (HLPP3) [MIM:107741]; also known as familial dysbetalipoproteinemia. Individuals with HLPP3 are clinically characterized by xanthomas, yellowish lipid deposits in the palmar crease, or less specific on tendons and on elbows. The disorder rarely manifests before the third decade in men. In women, it is usually expressed only after the menopause. The vast majority of the patients are homozygous for APOE*2 alleles. More severe cases of HLPP3 have also been observed in individuals heterozygous for rare APOE variants. The influence of APOE on lipid levels is often suggested to have major implications for the risk of coronary artery disease (CAD). Individuals carrying the common APOE*4 variant are at higher risk of CAD. Genetic variations in APOE are associated with Alzheimer disease type 2 (AD2) [MIM:104310]. It is a late-onset neurodegenerative disorder characterized by progressive dementia, loss of cognitive abilities, and deposition of fibrillar amyloid proteins as intraneuronal neurofibrillary tangles, extracellular amyloid plaques and vascular amyloid deposits. The major constituent of these plaques is the neurotoxic amyloid-beta-APP 40-42 peptide (s), derived proteolytically from the transmembrane precursor protein APP by sequential secretase processing. The cytotoxic C-terminal fragments (CTFs) and the caspase-cleaved products such as C31 derived from APP, are also implicated in neuronal death. Note=The APOE*4 allele is genetically associated with the common late onset familial and sporadic forms of Alzheimer disease. Risk for AD increased from 20% to 90% and mean age at onset decreased from 84 to 68 years with increasing number of APOE*4 alleles in 42 families with late onset AD. Thus APOE*4 was virtually sufficient to cause AD by age 80. The mechanism by which APOE*4 participates in pathogenesis is not known. Defects in APOE are a cause of sea-blue histiocyte disease (SBHD) [MIM:269600]; also known as sea-blue histiocytosis. This disorder is charact
序列相似性	Belongs to the apolipoprotein A1/A4/E family.

翻译后修饰

Synthesized with the sialic acid attached by O-glycosidic linkage and is subsequently desialylated in plasma. O-glycosylated with core 1 or possibly core 8 glycans. Thr-307 is a minor glycosylation site compared to Ser-308.

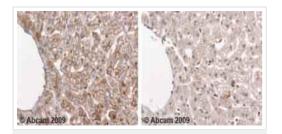
Glycated in plasma VLDL of normal subjects, and of hyperglycemic diabetic patients at a higher level (2-3 fold).

Phosphorylation sites are present in the extracelllular medium.

细胞定位

Secreted.

#### 图片

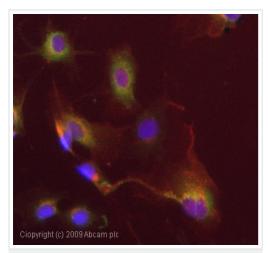


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Apolipoprotein E antibody (ab24139)

Ab24139 staining Human normal liver parenchyma. Staining is localized to the cytoplasm.

Left panel: with primary antibody at 1:400 dilution. Right panel: isotype control.

Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer citrate pH 6.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS), then incubated with primary antibody for 20 minutes, and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein E antibody (ab24139)

ICC/IF image of ab24139 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab24139, 1/1000 dilution) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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