abcam

Product datasheet

Anti-LRAT antibody ab137304

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Overview

Product name Anti-LRAT antibody

Description Rabbit polyclonal to LRAT

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide corresponding to amino acids within an internal region of Human LRAT.

Positive control COLO205 cell lysates

General notesThe 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 antibodies 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 be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 49% PBS, 0.88% Sodium chloride, 50% Glycerol (glycerin, glycerine)

PBS is without Mg²⁺ and Ca²⁺

Purity Immunogen affinity purified

Purification notes ab137304 was affinity purified from Rabbit antiserum by affinity chromatography using epitope

specific peptide.

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise quarantee

Our Abpromise guarantee covers the use of ab137304 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/1000. Predicted molecular weight: 26 kDa.

Target

Function

Transfers the acyl group from the sn-1 position of phosphatidylcholine to all-trans retinol, producing all-trans retinyl esters. Retinyl esters are storage forms of vitamin A. LRAT plays a critical role in vision. It provides the all-trans retinyl ester substrates for the isomerohydrolase which processes the esters into 11-cis-retinol in the retinal pigment epithelium; due to a membrane-associated alcohol dehydrogenase, 11 cis-retinol is oxidized and converted into 11-cis-retinaldehyde which is the chromophore for rhodopsin and the cone photopigments.

Tissue specificity

Hepatic stellate cells and endothelial cells (at protein level). Found at high levels in testis and liver, followed by retinal pigment epithelium, small intestine, prostate, pancreas and colon. Low expression observed in brain. In fetal tissues, expressed in retinal pigment epithelium and liver, and barely in the brain.

Pathway

Cofactor metabolism; retinol metabolism.

Involvement in disease

Defects in LRAT are a cause of Leber congenital amaurosis type 14 (LCA14) [MIM:613341]. It is a severe dystrophy of the retina, typically becoming evident in the first years of life. Visual function is usually poor and often accompanied by nystagmus, sluggish or near-absent pupillary responses, photophobia, high hyperopia and keratoconus.

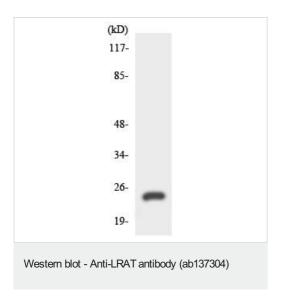
Sequence similarities

Belongs to the H-rev107 family.

Cellular localization

Endoplasmic reticulum membrane. Rough endoplasmic reticulum. Endosome > multivesicular body. Cytoplasm > perinuclear region. Present in the rough endoplasmic reticulum and multivesicular body in hepatic stellate cells. Present in the rough endoplasmic reticulum and perinuclear region in endothelial cells.

Images



Anti-LRAT antibody (ab137304) at 1/500 dilution + COLO205 cell lysate at 30 μg

Predicted band size: 26 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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