

LRAT Polyclonal Antibody

Catalog # AP70770

Specification

LRAT Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF <u>095237</u> Human, Mouse, Rat Rabbit Polyclonal

LRAT Polyclonal Antibody - Additional Information

Gene ID 9227

Other Names LRAT; Lecithin retinol acyltransferase; Phosphatidylcholine--retinol O-acyltransferase

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

LRAT Polyclonal Antibody - Protein Information

Name LRAT (HGNC:6685)

Function

Transfers the acyl group from the sn-1 position of phosphatidylcholine to all-trans retinol, producing all-trans retinyl esters (PubMed:9920938). Retinyl esters are storage forms of vitamin A (Probable). LRAT plays a critical role in vision (Probable). 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 (Probable). Required for the survival of cone photoreceptors and correct rod photoreceptor cell morphology (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein. Rough endoplasmic reticulum. Endosome, multivesicular body. Cytoplasm, perinuclear region. Note=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 (By similarity).

Tissue Location

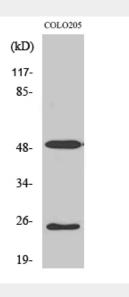
Hepatic stellate cells and endothelial cells (at protein level). Found at high levels in testis and liver, followed by retinal pigment epithelium, small intestine, prostate, pancreas and colon. Low expression observed in brain. In fetal tissues, expressed in retinal pigment epithelium and liver, and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

LRAT Polyclonal Antibody - Protocols

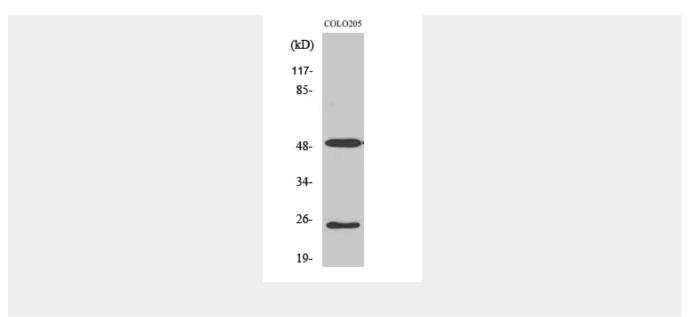
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

LRAT Polyclonal Antibody - Images







LRAT Polyclonal Antibody - Background

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.