

LRAT Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51668**Specification**

LRAT Antibody - Product Information

Application	WB, E
Primary Accession	O95237
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25 KDa

LRAT Antibody - Additional Information**Gene ID** 9227**Other Names**

Lecithin retinol acyltransferase, Phosphatidylcholine--retinol O-acyltransferase, LRAT

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

LRAT 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 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LRAT Antibody - Images

LRAT 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.

LRAT Antibody - References

Ruiz A., et al. J. Biol. Chem. 274:3834-3841(1999).
Zolfaghari R., et al. Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
Ota T., et al. Nat. Genet. 36:40-45(2004).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Mondal M.S., et al. Biochemistry 39:5215-5220(2000).