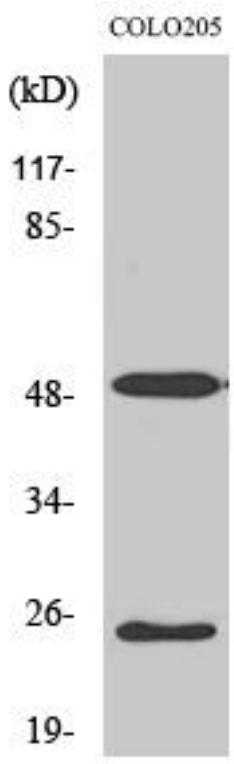
LRAT Monoclonal Antibody

Catalog No	YP-mAb-01848
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	LRAT
Protein Name	Lecithin retinol acyltransferase
Immunogen	The antiserum was produced against synthesized peptide derived from human LRAT. AA range:111-160
Specificity	LRAT Monoclonal Antibody detects endogenous levels of LRAT protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	LRAT; Lecithin retinol acyltransferase; Phosphatidylcholine--retinol O-acyltransferase
Observed Band	27kD
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass membrane protein . 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 (By similarity). .
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.
Function	catalytic activity:Phosphatidylcholine + retinol--[cellular-retinol-binding-protein] = 2-acylglycerophosphocholine + retinyl-ester--[cellular-retinol-binding-protein].,disease:Defects in LRAT are a cause of severe early-onset retinal dystrophy (RD) [MIM:604863].,enzyme regulation:Inhibited by all-trans-retinyl alpha-bromoacetate and N-boc-L-biocytinyl-11-aminoundecane chloro-methyl ketone (BACMK).,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
Background	lecithin retinol acyltransferase (phosphatidylcholine--retinol O-acyltransferase)(LRAT) Homo sapiens The protein encoded by this gene localizes to the endoplasmic reticulum, where it catalyzes the esterification of all-trans-retinol into all-trans-retinyl ester. This reaction is an important step in vitamin A metabolism in the visual system. Mutations in this gene have been associated with early-onset severe retinal dystrophy and Leber congenital amaurosis 14. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2014],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using LRAT Monoclonal Antibody