

Product datasheet for **TR505320**

Lrat Mouse shRNA Plasmid (Locus ID 79235)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Lrat Mouse shRNA Plasmid (Locus ID 79235)
Locus ID:	79235
Synonyms:	1300010A18Rik; AI449251
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Lrat - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 79235). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_023624 , NM_023624.1 , NM_023624.2 , NM_023624.3 , NM_023624.4 , BC141378 , BC037373 , BC141375
UniProt ID:	Q9J160
Summary:	Transfers the acyl group from the sn-1 position of phosphatidylcholine to all-trans retinol, producing all-trans retinyl esters (By similarity). Retinyl esters are storage forms of vitamin A (By similarity). LRAT plays a critical role in vision (By similarity). 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 (By similarity). Required for the survival of cone photoreceptors and correct rod photoreceptor cell morphology (PubMed:25416279). [UniProtKB/Swiss-Prot Function]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).