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Product datasheet for TL517820V

Lclat1 Mouse shRNA Lentiviral Particle (Locus ID 225010)

Product data:

Product Type:	shRNA Lentiviral Particles
Product Name:	Lclat1 Mouse shRNA Lentiviral Particle (Locus ID 225010)
Locus ID:	225010
Synonyms:	Agpat8; Al181996; Alcat1; Gm91; Lycat
Vector:	pGFP-C-shLenti (TR30023)
Format:	Lentiviral particles
Components:	Lclat1 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10^7 TU/ml.
RefSeq:	<u>NM_001081071, NM_001177967, NM_001177968, NM_001081071.1, NM_001081071.2, NM_001081071.2, NM_001177967.1, NM_001177968.1, BC158076, BC147499, BC150884, BC158079</u>
UniProt ID:	<u>Q3UN02</u>
Summary:	Exhibits acyl-CoA:lysocardiolipin acyltransferase (ALCAT) activity; catalyzes the reacylation of lyso-cardiolipin to cardiolipin (CL), a key step in CL remodeling (PubMed:15152008). Recognizes both monolysocardiolipin and dilysocardiolipin as substrates with a preference for linoleoyl-CoA and oleoyl-CoA as acyl donors (PubMed:15152008). Also exhibits 1-acyl-sn- glycerol-3-phosphate acyltransferase activity (AGPAT) activity; converts 1-acyl-sn-glycerol-3- phosphate (lysophosphatidic acid or LPA) into 1,2-diacyl-sn-glycerol-3- phosphate (phosphatidic acid or PA) by incorporating an acyl moiety at the sn-2 position of the glycerol backbone (By similarity). Possesses lysophosphatidylinositol acyltransferase (LPIAT) activity (PubMed:20668164). Possesses lysophosphatidylglycerol acyltransferase (LPGAT) activity (By similarity). Required for establishment of the hematopoietic and endothelial lineages (PubMed:17675553).[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 <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .



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CRIGENE Lclat1 Mouse shRNA Lentiviral Particle (Locus ID 225010) – TL517820V

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).

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