

### Product datasheet for RC214304L4

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## LCLAT1 (NM\_001002257) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: LCLAT1 (NM\_001002257) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: LCLAT1

Synonyms: 1AGPAT8; AGPAT8; ALCAT1; HSRG1849; LYCAT; UNQ1849

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC214304).

Sequence:

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**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM\_001002257

ORF Size: 1128 bp





#### LCLAT1 (NM\_001002257) Human Tagged Lenti ORF Clone - RC214304L4

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001002257.1</u>

 RefSeq Size:
 4872 bp

 RefSeq ORF:
 1131 bp

 Locus ID:
 253558

 UniProt ID:
 Q6UWP7

 Cytogenetics:
 2p23.1

**Protein Families:** Transmembrane

**Protein Pathways:** Ether lipid metabolism, Glycerolipid metabolism, Glycerophospholipid metabolism, Limonene

and pinene degradation, Metabolic pathways, Phenylalanine metabolism, Tyrosine

metabolism

MW: 44.4 kDa

**Gene Summary:** Exhibits acyl-CoA:lysocardiolipin acyltransferase (ALCAT) activity; catalyzes the reacylation of

lyso-cardiolipin to cardiolipin (CL), a key step in CL remodeling (By similarity). Recognizes both monolysocardiolipin and dilysocardiolipin as substrates with a preference for linoleoyl-CoA and oleoyl-CoA as acyl donors (By similarity). 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

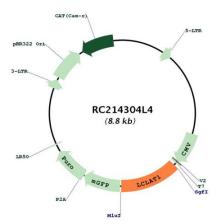
PA) by incorporating an acyl moiety at the sn-2 position of the glycerol backbone

(PubMed:16620771). Possesses both lysophosphatidylinositol acyltransferase (LPIAT) and lysophosphatidylglycerol acyltransferase (LPGAT) activities (PubMed:19075029). Required for establishment of the hematopoietic and endothelial lineages (By similarity).[UniProtKB/Swiss-

Prot Function]



# **Product images:**



Circular map for RC214304L4