

Product datasheet for RR203122L3

Lpcat1 (NM_001100735) Rat Tagged Lenti ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Lpcat1 (NM_001100735) Rat Tagged Lenti ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Lpcat1 |
| Synonyms: | Ayt12; RGD1311599 |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-Myc-DDK-P2A-Puro (PS100092) |
| E. coli Selection: | Chloramphenicol (34 ug/mL) |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RR203122). |
| Restriction Sites: | SgfI-RsrII |
| Cloning Scheme: | |

Cloning sites used for ORF Shuttling:

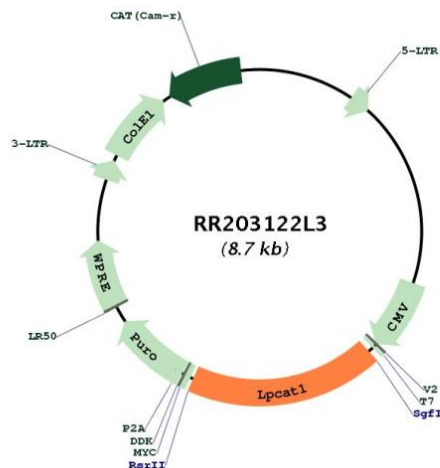


* The last codon before the Stop codon of the ORF.



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Plasmid Map:



ACCN: NM_001100735

ORF Size: 1602 bp

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: [NM_001100735.1](#), [NP_001094205.1](#)

RefSeq Size: 3621 bp

RefSeq ORF: 1605 bp

Locus ID: 361467

UniProt ID: [Q1HAQ0](#)

Cytogenetics: 1p11

Gene Summary: Possesses both acyltransferase and acetyltransferase activities (PubMed:16864775). Activity is calcium-independent (By similarity). Mediates the conversion of 1-acyl-sn-glycero-3-phosphocholine (LPC) into phosphatidylcholine (PC) (PubMed:16864775). Displays a clear preference for saturated fatty acyl-CoAs, and 1-myristoyl or 1-palmitoyl LPC as acyl donors and acceptors, respectively (PubMed:16864775). May synthesize phosphatidylcholine in pulmonary surfactant, thereby playing a pivotal role in respiratory physiology (PubMed:16864775). Involved in the regulation of lipid droplet number and size (By similarity).[UniProtKB/Swiss-Prot Function]