

Product datasheet for TL704171

Lpcat1 Rat shRNA Plasmid (Locus ID 361467)

Product data:

Product Type: shRNA Plasmids

Product Name: Lpcat1 Rat shRNA Plasmid (Locus ID 361467)

Locus ID: 361467

Synonyms: Aytl2; RGD1311599

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Lpcat1 - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 361467). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>NM 001100735, NM 001100735.1</u>

UniProt ID: Q1HAQ0

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]

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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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).