

Product datasheet for **MC212743**

Lclat1 (NM_001081071) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Lclat1 (NM_001081071) Mouse Untagged Clone
Tag: Tag Free
Symbol: Lclat1
Synonyms: Agpat8; A1181996; Alcat1; Gm91; Lycat
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >MC212743 representing NM_001081071
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGTGCATGGAAGGGGATTTACTTTATACTCTTCTGTTTGGTGGAAAGCTTTTTTGGAAAGTATTTTTA
TGCTCGGCCCATTTTACCTTTGATGTTTATAAACCTGTCGTGGTATCGCTGGATTAGCAGCCGCTTTGT
GGCTACATGGCTCACACTTCTGTGGCATTGCTGGAGACCATGTTTGGTGTGAGAGTGGTTATAACAGGT
GACGCCTTTGTGCTGGAGAGCGGAGCGTCATCATGAACCACCGACACGTGTGGACTGGATGTTCC
TGTGGAAGTGTCTAATGAGGTACAGCTACCTCAGGGTGGAGAAGATTTGCCTCAAATCCAGTCTCAAAG
TGTTCTGGATTCGGCTGGGCCATGCAAGTTGCGGCCTTTATCTTTATTCATAGGAAGTGAAGGATGAT
AAGAGCCATTTTGAAGACATGATTGATTATTTTTGTGCCATCCATGAACCACTACAGCTTCTCATTTTTTC
CAGAAGGAACTGACCTCACAGAAAATAAAGGCTAGGAGTAATGATTTTGTGAGAAGAACGGACTTCA
GAAATATGAGTATGTTTTACACCAAGAACCACTGGCTTTACCTTTGTGGTGGACCGCCTAAGAGAAGGG
AAGAACCTCGATGCTGTTTCATGACATCACGGTCGCATATCCTTACAACATCCCTCAAAGTGAAGACACC
TTCTCCTTGGAGACTTTCCCAAGGAGATCCACTCCACGTCCAGCGGTATCCAGCTGACTCTTCCCAC
ATCCAAGGAGGACCTTCAGCTCTGGTGCCACAGAAGGTGGGAAGAAAAGGAGGAGAGGCTTCGGTCTTC
TACCAAGGAGAGAAAACTTCCACTTTACTGGCAGAGTACAGTTCACCTTGAAGTTCAGCTCAGAG
TCCTTGTGGTCAAGCTACTGTCCATAGTGTACTGGGCCTTGTCTGCTCTGCAATGTGCCTGCTCATATA
TCTGTACAGCCCTGTTCCGGTGGTATTTTATAATCAGCATTGTGTTCTTCGTGCTGCAGGAGAGAATATT
GGTGGACTGGAATCATTGAACTGCATGTTACCGTTTTTTACACAAGCACCCACATTTAAATTCAAAGA
AAAATGAGTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001081071
Insert Size:	1131 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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_001081071.2</u> , <u>NP_001074540.1</u>
RefSeq Size:	4476 bp
RefSeq ORF:	1131 bp
Locus ID:	225010
UniProt ID:	<u>Q3UN02</u>
Cytogenetics:	17 E1.3- E2
Gene Summary:	<p>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 dilyocardiolipin 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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript. Variants 1, 2 and 3 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>