

Product datasheet for MC212744

Lclat1 (NM_001177968) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Lclat1 (NM_001177968) Mouse Untagged Clone
Tag: Tag Free
Symbol: Lclat1
Synonyms: Agpat8; A1181996; Alcat1; Gm91; Lycat
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC212744 representing NM_001177968
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGTGCATGGAAGGGGATTTACTTTTACTCTTCTGTTTGGTGAAGCTTTTTTGAAGTATTTTTA
 TGCTCGGCCCATTTTACCTTTGATGTTTATAACCTGTCGTGGTATCGCTGGATTAGCAGCCGTCTTGT
 GGCTACATGGCTCACACTTCTGTGGCATTGCTGGAGACCATGTTTGGTGTGAGAGTGGTTATAACAGGT
 GACGCCTTTGTGCTGGAGAGCGGAGCGTCATCATGAACCACCGGACACGTGTGGACTGGATGTTCC
 TGTGGAAGTGTCTAATGAGGTACAGCTACCTCAGGGTGGAGAAGATTTGCCTCAAATCCAGTCTCAAAG
 TGTTCTGGATTGCGCTGGGCCATGCAAGTTGCGGCCCTTATCTTTATTCATAGGAAGTGAAGGATGAT
 AAGAGCCATTTTGAAGACATGATTGATTATTTTGTGCCATCCATGAACCACTACAGCTTCTCATTTTTTC
 CAGAAGGAAGTACCTCACAGAAAATAAAGGCTAGGAGTAATGATTTTGTGAGAAGAACGGACTTCA
 GAAATATGAGTATGTTTTACACCAAGAACCCTGGCTTTACCTTTGGTGGACCGCCTAAGAGAAGGG
 AAGAACCCTCGATGCTGTTTCATGACATCACGGTCGCATATCCTTACAACATCCCTCAAAGTGAAGCACC
 TTCTCCTTGGAGACTTTCCAAGGAGATCCACTTCCACGTCCAGCGGTATCCAGCTGACTCTTCCCAC
 ATCCAAGGAGGACCTTCAGCTCTGGTGCCACAGAAGGTGGGAAGAAAAGGAGGAGAGGCTTCGGTCTTC
 TACCAAGGAGAGAAAACTTCCACTTTACTGGGCAGAGTACAGTTCACCTTGCAAGTCTGAGCTCAGAG
 TCCTTGTGGTCAAGCTACTGTCCATAGTGTACTGGCCTTGTCTGCTGCAATGTGCCTGCTCATATA
 TCTGTACAGCCCTGTTCCGTGGTATTTTATAATCAGCATTGTGTTCTTCGTGCTGCAGGAGAGAATTTT
 GGTGGACTGAAATCATTGAAGTTCATGTTACCGTTTTTTACACAAGCACCCACATTTAAATTCAAAGA
 AAAATGAGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



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ACCN:	NM_001177968
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_001177968.1</u> , <u>NP_001171439.1</u>
RefSeq Size:	4444 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 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]</p> <p>Transcript Variant: This variant (3) differs in the 5' UTR compared to variant 1. 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>