

Product datasheet for **RC201320**

LENG4 (MBOAT7) (NM_024298) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LENG4 (MBOAT7) (NM_024298) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LENG4
Synonyms:	BB1; hMBOA-7; LENG4; LPIAT; LPLAT; LRC4; MBOA7; MRT57; OACT7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC201320 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGCCTGAAGAATGGACGTATCTAGTGGTTCTTCTTATCTCCATCCCCATCGGTTCTCTTTAAGA
 AAGCCGGTCTGGGCTGAAGAGATGGGGAGCAGCCGCTGTGGCCCTGGGGCTCACCTGTTCACCTGTGG
 CCCCCACACTTTGCATTCTCTGGTCACCATCTCGGGACCTGGGCCCTCATTAGGCCACGCCCTGCTCC
 TGCCACGCCCTGGCTCTGGCCTGGACTTCTCCTATCTCCTGTTCTTCCGAGCCCTCAGCCTCTGGGCC
 TGCCCACTCCCACGCCCTCACCAATGCCGTCCAGCTGCTGCTGACGCTGAAGCTGGTGAGCCTGGCCAG
 TGAAGTCCAGGACCTGCATCTGGCCAGAGGAAGAAATGGCCTCAGGCTCAGCAAGGGGCCACCCTG
 GGGCTGCTGCCGACGTGCCCTCCCTGATGGAGACTCAGCTACAGCTACTGCTACGTGGGAATCATGA
 CAGGCCGTTCTCCGCTACCGACCTACCTGGACTGGCTGGAGCAGCCCTCCCGGGGAGTGGCCAG
 CCTGCGGCCCTGCTGCGCCGCGCTGGCCGGCCCGCTTTCGGCTGCTGTTCTGCTCTCTCTCAC
 CTCTCCCGCTGGAGCCGTGCGCGAGGACGCCTTCTACGCCCGCCGCTGCCCGCCCGCTCTTCTACA
 TGATCCCCGTCTTCTCGCCTCCGCATGCGCTTCTACGTGGCCTGGATTGCCGCCGAGTGGGCTGCAT
 TGCCGCCGGCTTTGGGGCTACCCCGTGGCCGCCAAAGCCGGGCCGGAGGCCGCCACCCTCCAATGC
 CCACCCCCAGCAGTCCGGAGAAGGCGGCTTCTTGGAGTATGACTATGAGACCATCCGCAACATCGACT
 GCTACAGCACAGATTTCTGCGTGGGGTGGCGATGGCATGCGGTACTGGAACATGACGGTGCAGTGGTG
 GCTGGCGCAGTATCTACAAGAGCGCACCTGCCGTTCTATGTCTGCGGAGCGCCTGGACCATGCTG
 CTGAGCGCCTACTGGCAGGCCCTCACCCGGGCTACTACCTGAGCTTCTGACCATCCCGCTGTGCCTGG
 CTGCCGAGGGCCGGCTGGAGTCAAGCTGCGGGGGCGGCTGAGCCAGGGGGCCAGAAGGCTGGGACTG
 GGTGCACTGGTTCTGAAGATGCGCGCCTATGACTACATGTGCATGGGCTTCGTGCTGCTCTCTCTGCC
 GACACCCTTCGGTACTGGCCTCCATCTACTTCTGTATCCAATTCTGGCCCTGGCAGCCCTGGGGCTGG
 GGCTGGCTTTAGGTGGGGCAGCCCGCCGCGGAAGGCAGCATCCAGCCACCAGCCTTGGCCCGGA
 GAAGTCCGGGAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201320 protein sequence
 Red=Cloning site Green=Tags(s)

MSPEEWTYLVLLISIPIGFLFKKAGPGLKRWGAAVGLGLTLFTCPHTLHSLVTILGTWALIQAPCS
 CHALALAWTFSYLLFFRALSLGLPTPTPFTNAVQLLLTLKLVSLASEVQDLHLAQRKEMASGFSKGPTL
 GLLPDVPSLMETLSYSYCVGIMTGPFRRYRTYLDWLEQPFPGAVPSLRPLLRRRAWPAPLFGLLFLLSSH
 LFPLEAVREDAFYARPLPARLFYMI PVFFAFRMRFYVAWIAAECGCI AAGFGAYPVAAKARAGGGPTLQC
 PPPSSPEKAASLEYDYETIRNIDCYSTDFCVRVRDGMRYWNMTVQWLAQYIYKSAPARSYVLRSAWML
 LSAYWHGLHPGYLSFLTIPLC LA AEGRLESALRGRLSPGGQKAWDWHWFLKMRAVDYMC MGFVLLSLA
 DTLRYWASIFYCIHFLAL AALGLGLALGGSPSRRKAASQPTSLAPEKLREE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6832_b02.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_024298

ORF Size: 1416 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_024298.5](#)

RefSeq Size: 2616 bp

RefSeq ORF: 1419 bp

Locus ID: 79143

UniProt ID: [Q96N66](#)

Cytogenetics: 19q13.42

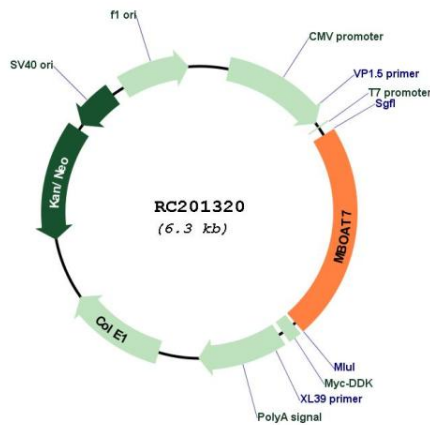
Domains: MBOAT

Protein Families: Transmembrane

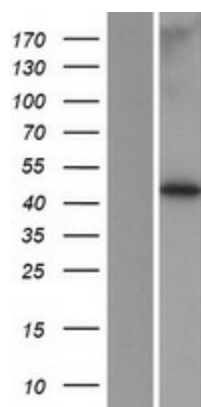
MW: 52.8 kDa

Gene Summary: This gene encodes a member of the membrane-bound O-acyltransferases family of integral membrane proteins that have acyltransferase activity. The encoded protein is a lysophosphatidylinositol acyltransferase that has specificity for arachidonoyl-CoA as an acyl donor. This protein is involved in the reacylation of phospholipids as part of the phospholipid remodeling pathway known as the Land cycle. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2009]

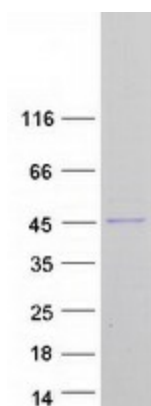
Product images:



Circular map for RC201320



Western blot validation of overexpression lysate (Cat# [LY411319]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201320 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MBOAT7 protein (Cat# [TP301320]). The protein was produced from HEK293T cells transfected with MBOAT7 cDNA clone (Cat# RC201320) using MegaTran 2.0 (Cat# [TT210002]).