

## Product datasheet for **RG201320**

### **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:	TurboGFP
Symbol:	LENG4
Synonyms:	BB1; hMBOA-7; LENG4; LPIAT; LPLAT; LRC4; MBOA7; MRT57; OACT7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG201320 representing NM\_024298  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCGCCTGAAGAATGGACGTATCTAGTGGTTCTTCTTATCTCCATCCCCATCGGTTCTCTTTAAGA  
 AAGCCCGTCTGGCTGAAGAGATGGGGAGCAGCCGCTGTGGCCTGGGGCTCACCTGTTCACCTGTGG  
 CCCCCACACTTTGCATTCTCTGGTCACCATCTCGGGACCTGGGCCCTATTTCAGGCCAGCCCTGCTCC  
 TGCCACGCCCTGGCTCTGGCCTGGACTTCTCCTATCTCCTGTTCTTCCGAGCCCTCAGCCTCTGGGCC  
 TGCCCACTCCCACGCCCTTACCAATGCCGTCCAGCTGCTGCTGACGCTGAAGCTGGTGAGCCTGGCCAG  
 TGAAGTCCAGGACCTGCATCTGGCCAGAGGAAGGAAATGGCCTCAGGCTTACAGCAAGGGGCCACCCTG  
 GGGCTGCTGCCGACGTGCCCTCCCTGATGGAGACTCAGCTACAGCTACTGCTACGTGGGAATCATGA  
 CAGGCCGTTCTCCGCTACCGACCTACCTGGACTGGCTGGAGCAGCCCTCCCGGGGAGTGGCCAG  
 CCTGCGGCCCTGCTGCGCCGCGCTGGCCGGCCCGCTTTCGGCCTGCTGTTCTGCTCTCCTCTCAC  
 CTCTCCCGCTGGAGCCGTGCGCGAGGACGCCTTCTACGCCCGCCCGTCCCGCCCGCCTCTTCTACA  
 TGATCCCCGTCTTCTCGCCTTCCGCATGCGCTTCTACGTGGCCTGGATTGCCGCCGAGTGGGGTGCAT  
 TGCCGCCGGCTTTGGGGCTACCCCGTGGCCGCCAAAGCCGGGCCGGAGGCGGCCACCCTCCAATGC  
 CCACCCCCAGCAGTCCGGAGAAGGCGGCTTCTTGGAGTATGACTATGAGACCATCCGCAACATCGACT  
 GCTACAGCACAGATTTCTGCGTGGGGTGGCGATGGCATGCGGTACTGGAACATGACGGTGCAGTGGTG  
 GCTGGCGCAGTATCTACAAGAGCGCACCTGCCGTTCTATGTCTGCGGAGCGCCTGGACCATGCTG  
 CTGAGCGCCTACTGGCAGGCCCTCACCCGGGCTACTACCTGAGCTTCTGACCATCCCGCTGTGCCTGG  
 CTGCCGAGGGCCGGCTGGAGTCAAGCCTCGCGGGGGCGGCTGAGCCAGGGGGCCAGAAGGCTGGGACTG  
 GGTCACCTGGTTCTGAAGATGCGCGCCTATGACTACATGTCATGGGCTTCGTGCTGCTCTCCTTGGCC  
 GACACCCTTCGGTACTGGCCTCCATCTACTTCTGTATCCAATTCTGGCCCTGGCAGCCCTGGGGCTGG  
 GGCTGGCTTTAGGTGGGGCAGCCCGCCGCGGAAGGCAGCATCCAGCCACCAGCCTTGGCCCGGA  
 GAAGCTCCGGGAGGAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG201320 representing NM\_024298  
 Red=Cloning site Green=Tags(s)

MSPEEWTYLVLLISIPIGFLFKKAGPGLKRWGAAVGLGLTLFTCGPHTLHSLVTILGTWALIQAPCS  
 CHALALAWTFSYLLFFRALSLGLPTPTPFTNAVQLLLTLKLVSLASEVQDLHLAQRKEMASGFSKGP  
 TLLPDVPSLMETLSYSYCYVIMTGPFFRFRYRTYLDWLEQPFPGAVPSLRPLLRRAWPAPLFLFLLSSH  
 LFPLEAVREDAFYARPLPARLFYMIPIVFFAFRMRFYVAWIAAECGCIAGFGAYPVAAKARAGGGPTLQC  
 PPPSSPEKAASLEYDYETIRNIDCYSTDFCVRVRDGMRYWNMTVQWLLAQYIYKSAPARSYVLRSAWML  
 LSAYWHGLHPGYLSFLTIPLCLAAEGRLESALRGRSPGGQKAWDWHWFLKMRAYDYMCMGFVLLSLA  
 DTLRYWASIYFCIHFLAALGLGLALGGGSPSRKAASQPTSLAPEKLREE

**TRTRPLE** - GFP Tag - V

**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](mailto: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.

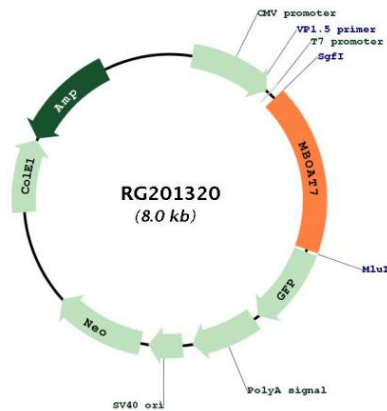
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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: 2529 bp  
 RefSeq ORF: 1419 bp  
 Locus ID: 79143  
 UniProt ID: [Q96N66](#)  
 Cytogenetics: 19q13.42  
 Domains: MBOAT  
 Protein Families: Transmembrane  
 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 RG201320