

## Product datasheet for **MR207548**

### **Mboat7 (NM\_029934) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Mboat7 (NM_029934) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mboat7
Synonyms:	5730589L02Rik; BB1; Leng4; Lpiat; Lpiat1; mBB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR207548 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGACACCCGAAGAATGGACATATCTAATGGTCTTCTTATCTCCATCCCTGTTGGCTTCTCTTTAAGA  
 AAGCTGGACCTGGGCTGAAGAGATGGGGGCGAGCTGTGGCCCTGGGGCTCACCTTATCACCTGTGG  
 CCCCCACAGTTTGCATTCTGTATCACCATCTTGGGAACCTGGGCCCTCATTAGGCCACGCCCTGCTCC  
 TGCCATGCCCTGGCTCTTGCCTGGACCTTCTCCTATCTCCTTCTTCCGAGCCCTCAGCCTGCTGGGCC  
 TGCCCACTCCCACGCCCTCACCAATGTGTCCAGCTGCTGTTGACACTGAAGTTGGTGAGTCTAGCTAG  
 TGAAGTCCAGGATCTGCATCTGGCTCAGAGAAAGGAAATAGCCTCCGGCTTCCACAAGGAGCCTACGCTG  
 GGCCTCTCCCTGAGTCCCTCTTTGATGGAGACTCAGCTATAGCTACTGTTACGTGGGAATCATGA  
 CAGGCCATTCTCCGCTACCGACCTACCTGGATTGGCTGGAACAGCCCTTCCCGAAGCCGTGCCAG  
 CCTGAGGCCCTGCTGCGCCGCGCTGGCCAGCCCGCTTTTGGCTGCTCTTCTGCTGTCTCCCAT  
 CTCTTCCCACTGGAAGCTGTGCTGAGGACGCCTTCTACGCCCGCCGCTGCCACCCGCTCTTCTACA  
 TGATCCCGGTCTTCTTCGCCTCCGCATGCGCTTCTACGTTGCCTGGATTGCGGCCGAGTGCGGTTGCAT  
 TGCCGCGGGCTTCGGGGCTACCCTGTGGCTGCCAAAGCCGGGCGGGGGCGGCCACCTCCAATGC  
 CCACCCCTAGCAGTCCGGAGATTGACGCTTCCCTGGAGTATGACTATGAGACCATCCGTAACATCGACT  
 GCTATGGCACAGACTTCTGCGTGCCTGTGCGGGATGGCATGCGATACTGGAACATGACCGTGCAGTGGT  
 GCTGGCACAGTACATCTACAAGAGCGCACCTTTCTGCTCTACGTTTTGAGGAGTGCCTGGACCATGCTG  
 TTGAGTGCCTACTGGCATGGCTCCACCCTGGTACTACCTAAGCTTTCATGACCATCCCGCTGTGCTGG  
 CTGCTGAGGGCTATTTGGAGTCAAGCTTCCGAGACACCTGAGCCCGGGGGCCAGAAAGCTGGGACTG  
 GGTCCACTGGTTCTGAAGATGCGTGCCTACGACTACATGTGCATGGGCTTTGTGCTCCTTCCATGGCT  
 GACACACTCCGGTACTGGCCTCCATCTACTTCTGGGTCCACTTCTAGCCCTGGCTGCTTGGGCTGG  
 GGCTGGTTTTGGGTGGGGGCGAGCCAGCAAGAGGAAGACACCATCCAGGCTACCAGCAGCAAGCGAA  
 GGAAAAGCTCCGGGAAGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR207548 protein sequence  
 Red=Cloning site Green=Tags(s)

MTPEEWTYLMVLLISIPVGFLLFKKAGPGLKRWGAAAVGLGLTLFTCGPHSLHSLITILGTWALIQAPCS  
 CHALALAWTFSYLLFFRALSLGLPTPTPFTNAVQLLLTLKLVSLASEVQDLHLAQRKEIASGFHKEPTL  
 GLLPEVPSLMETLSYSYCVGIMTGPFFRYRITYLDWLEQPFPEAVPSLRPLLRRAPAPLFGLLFLLSSH  
 LFPLEAVREDAFYARPLPTRLFYMIPVFFAFRMRFYVAWIAAECGCIAGFGAYPVAAKARAGGGPTLQC  
 PPPSSPEIAASLEYDYETIRNIDCYGTDVFRVDRGMRYWNMTVQWLAQYIYKSAPFCSYVLRSAWML  
 LSAYWHGLHPGYLSFMTIPLCLAAEGYLESALRRHLSPGGQKAWDWHWFLKMRAYDYMCMGFVLLSMA  
 DTLRYWASIFYFWHFLALACLGLGLVGGGSPSKRKTPSQATSSQAKEKLREE

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_029934

**ORF Size:** 1422 bp

**OTI Disclaimer:** 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\\_029934.1](#), [NM\\_029934.2](#), [NM\\_029934.3](#), [NP\\_084210.2](#)

**RefSeq Size:** 2880 bp

**RefSeq ORF:** 1422 bp

**Locus ID:** 77582

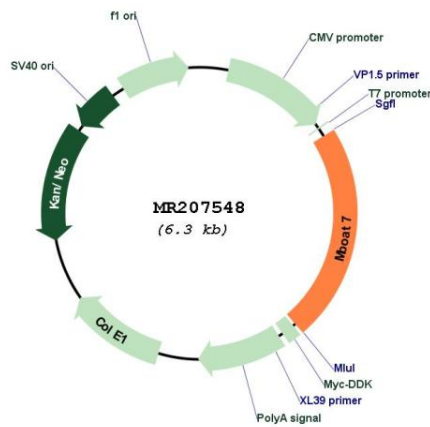
**UniProt ID:** [Q8CHK3](#)

**Cytogenetics:** 7 A1

**MW:** 53.4 kDa

**Gene Summary:** Acyltransferase which contributes to the regulation of free arachidonic acid (AA) in the cell through the remodeling of phospholipids. Mediates the conversion of lysophosphatidylinositol (1-acylglycerophosphatidylinositol or LPI) into phosphatidylinositol (1,2-diacyl-sn-glycero-3-phosphoinositol or PI) (LPIAT activity). Prefers arachidonoyl-CoA as the acyl donor (PubMed:23097495). Lysophospholipid acyltransferases (LPLATs) catalyze the reacylation step of the phospholipid remodeling pathway also known as the Lands cycle (By similarity). Required for cortical lamination during brain development (PubMed:23097495). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR207548