

Product datasheet for **MG207548**

Mboat7 (NM_029934) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mboat7 (NM_029934) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mboat7
Synonyms:	5730589L02Rik; BB1; Leng4; Lpiat; Lpiat1; mBB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207548 representing NM_029934
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACACCCGAAGAATGGACATATCTAATGGTCCTTCTTATCTCCATCCCTGTTGGCTTCTCTTTAAGA
 AAGCTGGACCTGGGCTGAAGAGATGGGGGCAGCAGCTGTGGCCTGGGGCTCACCTTATCACCTGTGG
 CCCCCACAGTTTGCATTCTGTATCACCATCTTGGGAACCTGGGCCCTCATTAGGCCACGCCCTGCTCC
 TGCCATGCCCTGGCTCTTGCCTGGACCTTCTCCTATCTCCTTCTTCCGAGCCCTCAGCCTGCTGGGCC
 TGCCCACTCCCACGCCCTTACCAATGTGTCCAGCTGCTGTTGACACTGAAGTTGGTGAGTCTAGCTAG
 TGAAGTCCAGGATCTGCATCTGGCTCAGAGAAAGGAAATAGCCTCCGGCTTCCACAAGGAGCCTACGCTG
 GGCCTCTCCCTGAGTCCCTCTTTGATGGAGACTCAGCTATAGCTACTGTTACGTGGGAATCATGA
 CAGGCCATTCTCCGCTACCGACCTACCTGGATTGGCTGGAACAGCCCTTCCCGAAGCCGTGCCAG
 CCTGAGGCCCTGCTGCGCCGCGCTGGCCAGCCCGCTTTTGGCTGCTCTTCTGCTGCTCCTCCAT
 CTCTTCCCACTGGAAGCTGTGCTGAGGACGCCTTCTACGCCCGCCGCTGCCACCCGCCTCTTCTACA
 TGATCCCGGTCTTCTTCGCCTTCCGCATGCGCTTCTACGTTGCCTGGATTGCGGCCGAGTGCGGTTGCAT
 TGCCGCGGGCTTCGGGGCTACCTGTGGCTGCCAAAGCCGGGCGGGGGCGGCCACCTCCAATGC
 CCACCCCTAGCAGTCCGGAGATTGAGCTTCCCTGGAGTATGACTATGAGACCATCCGTAACATCGACT
 GCTATGGCACAGACTTCTGCGTGCCTGTGCGGGATGGCATGCGATACTGGAACATGACCGTGCAGTGGT
 GCTGGCACAGTACATCTACAAGAGCGCACCTTTCTGCTCCTACGTTTTGAGGAGTGCCTGGACCATGCTG
 TTGAGTGCCTACTGGCATGGCTCCACCCTGGTTACTACCTAAGCTTTCATGACCATCCCGCTGTGCTGG
 CTGCTGAGGGCTATTTGGAGTCAAGCTTCCGGAGACCTGAGCCCGGGGGCCAGAAAGCTGGGACTG
 GGTTCCACTGGTTCTGAAGATGCGTGCCTACGACTACATGTCATGGGCTTTGTGCTCCTTCCATGGCT
 GACACACTCCGGTACTGGCCTCCATCTACTTCTGGGTCCACTTCTAGCCCTGGCTGCTTGGGCTGG
 GGCTGGTTTTGGGTGGGGCAGCCCAAGAGGAAGACACCATCCAGGCTACCAGCAGCAAGCGAA
 GGAAAAGCTCCGGGAAGAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

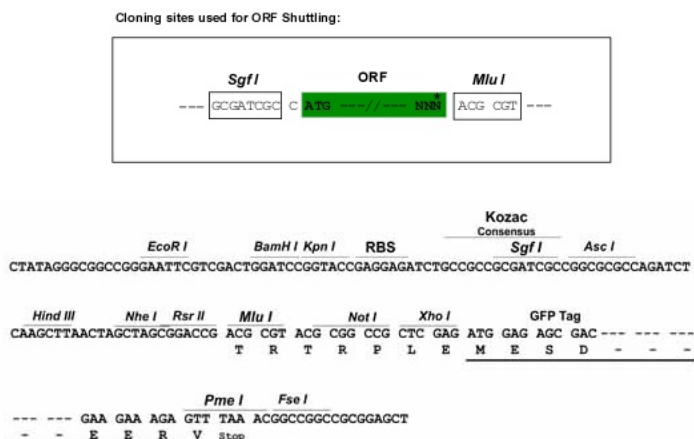
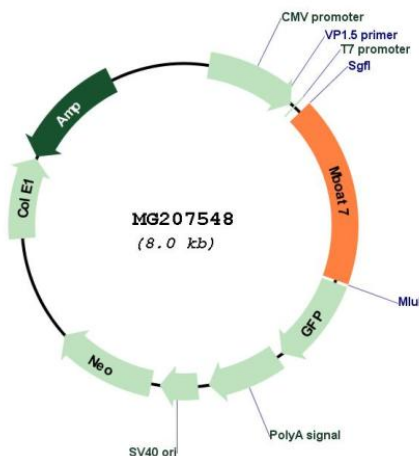
>MG207548 representing NM_029934
 Red=Cloning site Green=Tags(s)

MTPEEWTYLMVLLISIPVGFLFKKAGPGLKRWGAAVGLGLTLFTCGPHSLHSLITILGTWALIQAPCS
 CHALALAWTFSYLLFFRALSLGLPTPTPFTNAVQLLLTLKLVSLASEVQDLHLAQRKEIASGFHKEPTL
 GLLPEVPSLMETLSYSYCYVIMTGPFFRFRYRXYLDWLEQPFPEAVPSLRPLLRRAWPAPLFGLLFLLSSH
 LFPLEAVREDAFYARPLPTRLFYMIPVFFAFRMRFYVAWIAAECGCIAGFGAYPVAAKARAGGGPTLQC
 PPPSSPEIAASLEYDYETIRNIDCYGTDGFCVVRDGMRYWNMTVQWLLAQYIYKSAPFCSYLRSWML
 LSAYWHGLHPGYL SFMTIPLCLAAEGYLESALRRHLSPGGQKAWDWHVFLKMRAYDYMCMGFVLLSMA
 DTLRYWASIFYWVHFLALACLGLGLVVLGGGSPSKRKTPSQATSSQAKEKREE

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_029934

ORF Size: 1419 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_029934.3](#), [NP_084210.2](#)

RefSeq Size: 2880 bp

RefSeq ORF: 1422 bp

Locus ID: 77582

UniProt ID: [Q8CHK3](#)

Cytogenetics: 7 A1

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]