

Product datasheet for **RC223078**

MAP1LC3B2 (NM_001085481) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAP1LC3B2 (NM_001085481) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAP1LC3B2
Synonyms:	ATG8G
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223078 representing NM_001085481 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGCCGTCGGAGAAGACCTTCAAGCAGCGGCGCACCTTCGAACAAAGAGTAGAAGATGTCCGACTTATTC
 GAGAGCAGCATCCAACAAAATCCCGTGATAATAGAACGATACAAGGGTGAGAAGCAGCTTCTGTCTT
 GGATAAAACAAAGTTCCTTGACCTGACCATGTCAACATGAGTGAGCTCATCAAGATAATTAGAAGGCGC
 TTACAGCTCAATGCTAATCAGGCCTTCTCCTGTTGGTGAACGGACACAGCATGGTCAGCGTCTCCACAC
 CAATCTCAGAGGTGATGAGAGTGAGAAAGATGAAGATGGATTCTGTACATGGTCTGTGCCTCCAGGA
 GACGTTCCGGATGAAATTGTCAGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC223078 representing NM_001085481 Red=Cloning site Green=Tags(s)
	MPSEKTFKQRRTFEQRVEDVRLIREQHPTKIPVVIERYKGEKQLPVLDTKFLVPDHNMSSELIKIIRRR LQLNANQAFFLLVNGHSMVSVSTPISEVYESEKDEDEGFLYMCASQETFGMKLSV TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8046_c06.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_001085481

ORF Size: 375 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.

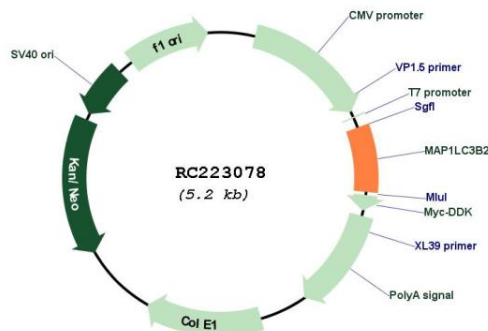
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

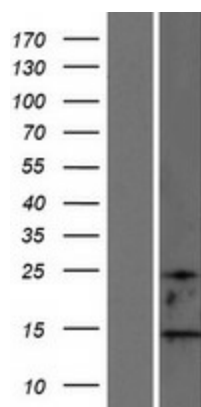
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001085481.3</u>
RefSeq Size:	832 bp
RefSeq ORF:	378 bp
Locus ID:	643246
UniProt ID:	<u>A6NCE7</u>
Cytogenetics:	12q24.22
MW:	14.4 kDa
Gene Summary:	Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes). Plays a role in mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC223078



Western blot validation of overexpression lysate (Cat# [LY421324]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223078 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).