

## Product datasheet for **MR230600**

### Atg16l1 (NM\_001205392) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atg16l1 (NM_001205392) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atg16l1
Synonyms:	1500009K01Rik; Apg16l; Atg16l; WDR30
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR230600 representing NM\_001205392  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCGTCGGCCTGCGCGCCGAGACTTCCCGCTGGAAGCGTCACATCGCGGAGGAAGTCTGAGCGCC  
 GGGACCGACTGCAGAGGCAGGCGTTCGAGGAGATCATTCTGCAGTATACCAAGTTGCTGGAAAAGTCAGA  
 TCTTCATTCAAGTATTGACCCAGAACTACAAGCAGAAAAGCATGACATGCCAAATAGGCATGAAATAAGT  
 CCTGGACATGATGGTGCCTGGAATGATAGTCAACTACAAGAAATGGCCAGTTGAGGATCAAACACCAGG  
 AAGAGCTGACCGAACTGCACAAGAAGCGTGGGAGTTAGCTCAGTTGGTATTGACCTGAACAACCAAT  
 GCAGCAGAAGGACAAGGAGATACAGATGAATGAAGCAAAGATTCGGAGTATTTACAGACCATCTCTGAC  
 CTGGAGACAACTGCCTGGACCTGCGCACCAACTGCAGGACCTCGAGGTAGCCAACCAGACCCTGAAGG  
 ATGAGTATGACGCCCTGCAGATTACTTTACTGCCCTAGAAGAGAACTGAGGAAAAGTACTGAGGAGAA  
 CCAGGAACTGGTACCAGATGGATGGCTGAGAAGGCCAAGAAGCCAATCGCCTCAATGCAGAGAATGAG  
 AAGGACTCCAGGAGCGTCAAGCACGGCTGCAGAAGGAGCTTGCAGAAGCAGCAAAGGAACCTCTACCTG  
 TTGAACAGGATGATGACATTGAAGTCATTGTGGATGAGACCTCAGACCACACAGAAGAGACCTCTCCCGT  
 CCGAGCTGTCAGCAGAGCAGCTACGAGACGCTCTGTCTTCCATCCCAGTCCCCAGGATATCATGGAC  
 ACTCATCTGTTCTGGTAAAGATGTGAGAGTCCCAACTACTGCCTCGTATGTCTTCGATGCGCATGACG  
 GAGAGGTCAACGCAGTGCAGTTCAGTCCAGGCTCCCGTTGCTGGCCACTGGAGGCATGGACCGCAGGGT  
 GAACTTTGGGAAGCATTTCGAGATAAATGTGAATCAAGGGCTCCCTGTCTGGCAGTAAATGCTGGAATT  
 ACAAGCATTGAATTTGATAGTGTGGAGTTACCTATTAGCAGCTTCAAATGATTTTCAAGCCGAATCT  
 GGACTGTGGATGATTATCGATTACGGCACACACTCACAGGCCACAGCGGAAAGTCTCTGCCAAGTT  
 CCTGCTGGACAATGCACGGATTGTCTCAGGAAGTCACGACCGGACCCTCAAAGTCTGGGATCTCCGACG  
 AAAGTCTGCATAAAAACAGTGTTTGCAGGATCCAGCTGCAATGACATTGTTTGCAGTGAACAATGTGTA  
 TGAGTGGACATTTTGACAAGAAAATTCGTTTCTGGGATATCCGGTTCAGAGAGTGTGGTCCGAGAGATGGA  
 ACTGTTAGGGAAGATCACTGCTCTGGACCTAAACCCTGAGAGAACTGAGCTCCTGAGCTGCTCCCGTAT  
 GACCTGCTAAAAGTATCGACCTCCGGACAAATGCAGTCAAACAGACATTCACTGCGCCTGGATTCAAAT  
 GCGGCTCTGACTGGACCCGGTGTCTTACGCCCTGATGGCAGTTACGTGGCAGCAGGCTCAGCCGAGGG  
 TTCTCTTTATGTCTGGAGTGTGCTGACAGGAAAGTGGAGAAGGTTCTTTCAAACAGCACAGCTCTTCT  
 ATCAATCGGTGGCGTGGCCCCCTCGGCTTACATGTTGTCAGTGTGGCAAAGGAAGCAGAGCTGTGC  
 TGTGGGCACAGCCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230600 representing NM\_001205392  
 Red=Cloning site Green=Tags(s)

MSSGLRAADFPRWKRHIAEELRRRDLRQRQAFEEIILQYTKLLEKSDLHSLVTQKLQAEKHDMPNRHEIS  
 PGHDGAWNDSQLQEMAQLRIKHQEELTELHKKRGELAQLVIDLNNQMQQKDKIEIQMNEAKISEYLQTI  
 SDLETNCLDLRTKLQDLEVANQTLKDEYDALQITFTALEEKLRKTTEENQELVTRWMAEKAQEANRLNAENE  
 KDSRRRQARLQKELAEAAKEPLPVEQDDIEIVDETSDHTEETSPVRAVSRAATRRSVSSIPVPQDIMD  
 THPASGKDVRVPTTASYVFDHDEVNVAQFSPGSRLATGGMDRRVKLWEAFGDKCEFKGSLSGSNAGI  
 TSIEFDSAGAYLLAASNDFASRIWTVDDYRLRHTLTGHSGKVLSAKFLDNARIVSGSHDRTLKLWDLRS  
 KVICIKTVFAGSSCNIVCTEQCVMSGHFDKIRFWDIRSESVVREMELLGKITALDLNPERTELLSCSRD  
 DLLKVIDLRTNAVKQTFAPGFKCGSDWTRVVFSPDGSYVAAGSAEGLVYVSVLTGKVEKVLKQHS  
 INAVAWAPSGLHVVSVDKGSRAVLWAQP

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

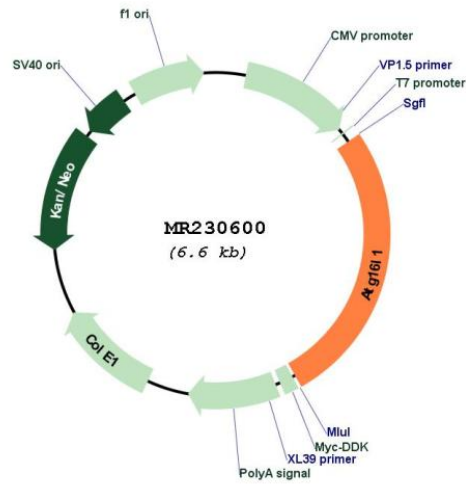
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001205392

ORF Size: 1764 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001205392.1</a> , <a href="#">NP_001192321.1</a>
<b>RefSeq Size:</b>	3075 bp
<b>RefSeq ORF:</b>	1767 bp
<b>Locus ID:</b>	77040
<b>Cytogenetics:</b>	1 D
<b>MW:</b>	66.7 kDa
<b>Gene Summary:</b>	Plays an essential role in autophagy: interacts with ATG12-ATG5 to mediate the conjugation of phosphatidylethanolamine (PE) to LC3 (MAP1LC3A, MAP1LC3B or MAP1LC3C), to produce a membrane-bound activated form of LC3 named LC3-II. Thereby, controls the elongation of the nascent autophagosomal membrane (PubMed:18849966, PubMed:12665549, PubMed:24954904, PubMed:24553140, PubMed:23392225). Regulates mitochondrial antiviral signaling (MAVS)-dependent type I interferon (IFN-I) production (By similarity). Negatively regulates NOD1- and NOD2-driven inflammatory cytokine response (PubMed:24238340). Instead, promotes with NOD2 an autophagy-dependent antibacterial pathway. Plays a role in regulating morphology and function of Paneth cell.[UniProtKB/Swiss-Prot Function]