

## Product datasheet for **RC231296**

### **ATG16L1 (NM\_001190266) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ATG16L1 (NM_001190266) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATG16L1
Synonyms:	APG16L; ATG16A; ATG16L; IBD10; WDR30
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC231296 representing NM\_001190266  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCAACTGAGGATTAAGCACCAAGAGGAAGTACTGACTGAATTACACAAGAAACGTGGGGAGTTAGCTC  
 AACTGGTGATTGACCTGAATAACCAAATGCAGCGGAAGGACAGGGAGATGCAGATGAATGAAGCAAAAAT  
 TGCAGAATGTTTGCAGACTATCTCTGACCTGGAGACGGAGTGCCTAGACCTGCGCACTAAGCTTTGTGAC  
 CTTGAAAGAGCCAACCAGACCCTGAAGGATGAATATGATGCCCTGCAGATCACTTTACTGCCTTGAGG  
 GAAAAGTACGGAAGAGAACCAGGAGCTGGTACCAGATGGATGGCTGAGAAAAGCCAGGA  
 AGCCAATCGGCTTAATGCAGAGAATGAAAAGACTCCAGGAGCGGCAAGCCCGCTGCAGAAAGAGCTT  
 GCAGAAGCAGCAAAGAACCTCTACCAGTGAACAGGATGATGACATTGAGGTCATTGTGGATGAACTT  
 CTGATCACACAGAAGAGACCTCTCTGTGCGAGCCATCAGCAGAGCAGCCACTAAGCGACTCTCGCAGCC  
 TGCTGGAGGCCTTCTGGATTCTACTAATATCTTTGGGAGACGCTCTGTCTCTTCCCTCCAGTCCCC  
 CAGGACAATGTGGATACTCATCTGGTTCTGGTAAAGAAGTGAGGGTACCAGCTACTGCCTTGTGTGCT  
 TCGATGCACATGATGGGGAAGTCAACGCTGTGCAGTTCAGTCCAGGTTCCCGGTTACTGGCCACTGGAGG  
 CATGGACCGCAGGGTTAAGCTTTGGGAAGTATTTGGAGAAAAATGTGAGTTCAAGGGTCCCTATCTGGC  
 AGTAATGCAGGAATTACAAGCATTGAATTTGATAGTGTGGATCTTACCTCTTAGCAGCTTCAAATGATT  
 TTGCAAGCCGAATCTGGACTGTGGATGATTATCGATTACGGCACACACTCACGGGACACAGTGGGAAAGT  
 GCTGTCTGCTAAGTTCCTGCTGGACAATGCGCGGATTGTCTCAGGAAGTACGACCGGACTCTCAAATC  
 TGGGATCTACGCAGCAAAGTCTGCATAAAGACAGTGTTCAGGATCCAGTTGCAATGATATTGTCTGCA  
 CAGGCAATGTGTAATGAGTGGACATTTGACAAGAAAAATTCGTTTCTGGGACATTCGATCAGAGCAT  
 AGTTCGAGAGATGGAGCTGTTGGGAAAGATTACTGCCCTGGACTTAAACCCAGAAAGGACTGAGCTCCTG  
 AGCTGCTCCCGTATGACTTGTAAAAGTATTGATCTCCGAACAAATGCTATCAAGCAGACATTCAAGT  
 CACCTGGGTTCAAGTGGGCTCTGACTGGACCAGAGTTGTCTTACGCCCTGATGGCAGTTACGTGGCGGC  
 AGGCTCTGCTGAGGGCTCTCTGTATCTGGAGTGTGCTCACAGGGAAAGTGGAAAAGTTCTTTCAAAG  
 CAGCACAGCTCATCCATCAATGCGGTGGCGTGGTGCCTCTGGCTCGCACGTTGTCAGTGTGGACAAAG  
 GATGCAAAGCTGTGCTGTGGGCACAGTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC231296 representing NM\_001190266  
 Red=Cloning site Green=Tags(s)

MAQLRIKHQEEL TELHKKRGELAQ LVIDLNNQMQRKDREMOMNEAKIAECLQTI SDLETECLDLRTKLCD  
 LERANQTLKDEYDALQITFALEGLRKTTEENQELVTRWMAEKAQEANRLNAENKDSRRRQARLQKEL  
 AEAAKEPLPVEQDDIEIVDETSDHTEETSPVRAISRATKRLSQPAGLLDSITNIFGRRSVSSFPVP  
 QDNVDTHPGSGKEVRVPATALCVFDAHDGEVNAVQFSPGSRLLATGGMDRRVKLWEVFGEKCEFKGSLSG  
 SNAGITSIEFDSAGSYLLAASNDFASRIWTVDDYRLRHTLTGHSGKVL SAKFLLDNARIVSGSHDRTLKL  
 WDLRSKVCIKTVFAGSSCN DIVCTEQVMGSHFDKIRFWDIRSESI VREMELLGKITALDLNPERTELL  
 SCSRDDLKVIDLRTNAIKQTF SAPGFKCGSDWTRVVFSPDGSYVAAGSAEGLS YIWSVL TGKVEKVL SK  
 QHSSSINAVAWSPSGSHVVSVDKGCKAVLWAQY

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8065\\_d07.zip](https://cdn.origene.com/chromatograms/mk8065_d07.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001190266

**ORF Size:** 1569 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\\_001190266.2](#)
**RefSeq ORF:** 1572 bp

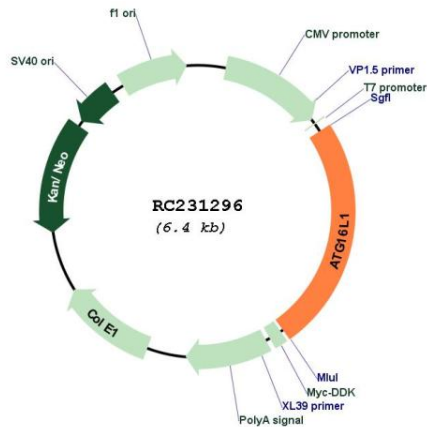
**Locus ID:** 55054

**UniProt ID:** [Q676U5](#)
**Cytogenetics:** 2q37.1

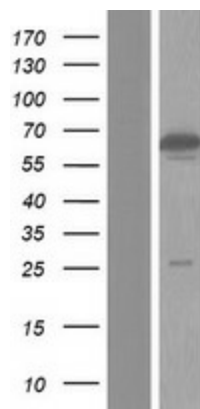
**MW:** 58.7 kDa

**Gene Summary:**

The protein encoded by this gene is part of a large protein complex that is necessary for autophagy, the major process by which intracellular components are targeted to lysosomes for degradation. Defects in this gene are a cause of susceptibility to inflammatory bowel disease type 10 (IBD10). Several transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Jun 2010]

**Product images:**


Circular map for RC231296



Western blot validation of overexpression lysate (Cat# [LY434295]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231296 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).