

Product datasheet for **RC221963**

ATG101 (NM_001098673) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATG101 (NM_001098673) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATG101
Synonyms:	C12orf44
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221963 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGTGTGCTCGGAGGTGCTGGAGGTGTCGGTGGAGGGCGGCAGGTGGAGGAGGCCATGCTGGCTG
TGCTGCACACGGTGCTTCTGCACCGCAGCACAGGCAAGTTCCACTACAAGAAGGAGGGCACCTACTCCAT
TGGCACCGTGGGCACCCAGGATGTTGACTGTGACTTCATCGACTTCACTTATGTGCGTGTCTTTCTGAG
GAACTGGATCGTCCCTGCGCAAGGTTGTTGGGAGTTCAAGGATGCACTGCGCAACTCTGGTGGCGATG
GGCTGGGGCAGATGTCTTGGAGTTCTACCAGAAGAAGAAGTCTCGCTGGCCATTCTCAGACGAGTGCAT
CCCATGGGAAGTGTGGACGGTCAAGGTGCATGTGGTAGCCCTGGCCACGGAGCAGGAGCGGCAGATCTGC
CGGGAGAAGTGGGTGAGAACTCTGCGAGAAGATCATCAACATCGTGGAGGTGATGAATCGGCATGAGT
ACTTGCCCAAGATGCCACACAGTCGGAGGTGGATAACGTGTTTGACACAGGCTTGCGGGACGTGCAGCC
CTACCTGTACAAGATCTCCTTCCAGATCACTGATGCCCTGGGCACCTCAGTCACCACCACCATGCGCAGG
CTCATCAAAGACACCCTTGCCCTC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221963 protein sequence
Red=Cloning site Green=Tags(s)

MNCRSEVLEVSVEGRQVEEAMLA VLHTVLLHRSTGKFHYKKEGTYSIGTVGTQDVDCDFIDFTYVRVSS
 ELDRALRKVVGEFKDALRNSGGDGLGQMSLEFYQKKSRWPFSDCEIPWEVWTVKVHVVALATEQERQIC
 REKVGEKLCEKIINIVEVMNRHEYLKMPQTQSEVDNVFDTGLRDVQPYLYKISFQITDALGTSVTTTMR
 LIKDTLAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6081_a10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001098673

ORF Size: 654 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_001098673.2](#)

RefSeq Size: 1287 bp

RefSeq ORF: 657 bp

Locus ID: 60673

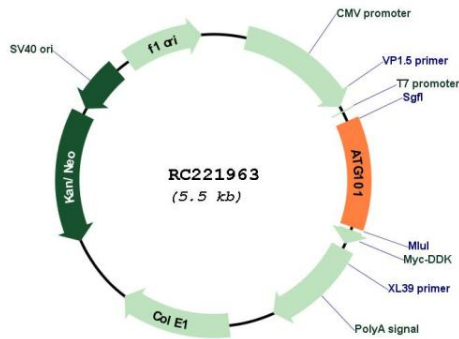
UniProt ID: [Q9BSB4](#)

Cytogenetics: 12q13.13

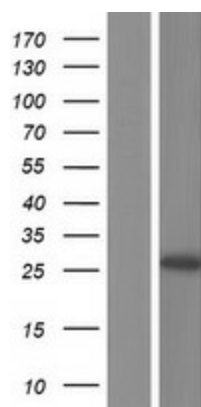
MW: 25 kDa

Gene Summary: Autophagy factor required for autophagosome formation. Stabilizes ATG13, protecting it from proteasomal degradation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC221963



Western blot validation of overexpression lysate (Cat# [LY420665]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221963 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).