

Product datasheet for MR202364

Atg10 (BC023455) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atg10 (BC023455) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atg10
Synonyms:	Agp10, APG10, Apg10p, Atg10l
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202364 representing BC023455 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGATGAGTTCTTTGGAGAAAAAGCTTCCAGCATTATTGTGCAGAATTCATCAGACATTCACAGC
AGATAGGCGATGGCTGGGAATGGAGAACAGCCAAGGAATGTTCTGATGGCTACATGTGCAAAACACAGTT
TCGAATAAAGAATGAGGCCTCGACACCACATGTGGGAACACCTGCCAGTGTGCTCACATGTCTCCCTACA
GAGGAGAATTTAGAGCTACCAATGGATGATTCTGAAGTGACGAGACCTGCAGCGGTGCCAGAAGTGATTA
AACATGAGTATCATGTCTTATACTCTTGTAGTTACCAAGTGCCGGTTCTTTACTTTAGGGCAAGCTTTTT
AGATGGGAGACCGTTAGCTCTGGAGGATATATGGGAAGGTGTTTCATGAGTGTATAAGCCGCGGCTGCTC
CAGGGACCGTGGGATACCATCACCCAGCAGGAACATCCAATACTTGGGCAACCATTTTTTTGTTCTACATC
CCTGCAAGACAAAATGAATTCATGACTGCTGTGCTAAAGAATTCACAGAAAATCAATAGAAATGTCAACTA
TATCACATCATGGCTGAGCCTCGTGGGGCCAGTGGTTGGTCTGAATTTACCTCTGAGCTATGCTAAAGCA
ACATCACAATCGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR202364 representing BC023455
Red=Cloning site Green=Tags(s)

MEDEFFGEKSFQHYCAEFIRHSQQIGDGWEWRTAKECSGYMCKTQFRIKNEASTPHVGTASPVL TCLPT
 EENLELPMDDSEVTRPAVAEVIKHEYHVLYSYQVPLVYFRASFLDGRPLALEDIWEGVHECYKPRLL
 QGPWDTITQQEHPILGQPFVFLHPCKTNEFMTAVLKNSQKINRNVNYITSWLSLVGPPVGLNPLPSYAKA
 TSQSE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: BC023455

ORF Size: 645 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: [BC023455](#), [AAH23455](#)

RefSeq Size: 1153 bp

RefSeq ORF: 647 bp

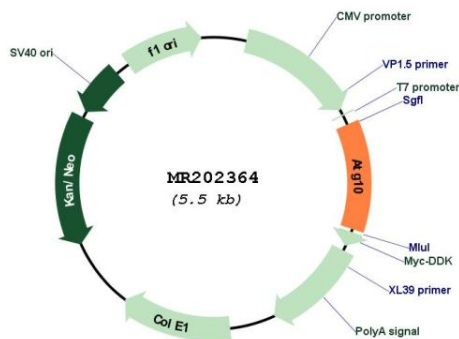
Locus ID: 66795

Cytogenetics: 13 C3

MW: 42.2 kDa

Gene Summary: E2-like enzyme involved in autophagy. Acts as an E2-like enzyme that catalyzes the conjugation of ATG12 to ATG5. ATG12 conjugation to ATG5 is required for autophagy. Likely serves as an ATG5-recognition molecule. Not involved in ATG12 conjugation to ATG3. Plays a role in adenovirus-mediated cell lysis.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202364