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Product datasheet for RC238050

ATG4D (NM_001281504) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATG4D (NM_001281504) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATG4D
Synonyms:	APG4-D; APG4D; AUTL4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC238050 representing NM_001281504 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGCAAGTGCTTCATCTCGCTGGGCGCTGCCCCTACGTCTCCCCAGGTTGGGTGGTTAAAAGCCGGACCA GCTTTAGCAAGATCTCCAGCATCCACCTCTGTGGCCGCCGCTACCGTTTCGAGGGCGAGGGTGACATACA GCGTTTCCAGCGGGACTTTGTGTCCCGCCTGTGGCTCACATACCGCCGGGACTTCCCGCCCCTTCCTGGG GGCTGCCTGACCTCGGACTGTGGCTGGGGGTGCATGTTACGCAGCGGCCAGATGATGCTGGCACAGGGCC TTCTGCTGCATTTCCTGCCCAGAGACTGGACATGGGCCGAGGGCATGGGCCTGGGCCCCCCTGAGCTGTC AGGGTCAGCCTCTCCCAGCCGGTACCATGGGCCTGCCCGCTGGATGCCCCCACGCTGGGCCCAGGGTGCC CCTGAGCTGGAGCAGGAACGCCGGCACCGGCAGATTGTGTCCTGGTTCGCCGACCACCCCCGGGCCCCCT TTGGCCTACACCGGCTGGTGGAGCTTGGGCAGAGCTCAGGCAAGAAGGCAGGTGACTGGTATGGGCCATC GCTAGTGGCACACATCCTCAGGAAAGCCGTGGAGAGCTGCTCCGACGTCACCCGCCTGGTGGTGTACGTT TCTCAGGACTGCACAGTGTACAAGGCGGATGTGGCACGCCTGGTGGCCAGGCCAGACCCCACAGCCGAGT GGAAGTCTGTGGTCATCCTGGTGCCCGTGCGACTGGGTGGCGAGACTCTCAACCCCGTGTATGTGCCCTG CGTGAAGGAACTCCTGCGTTGCGAGCTGTGCCTGGGCATCATGGGTGGGAAACCGCGACACTCACTGTAC TTCATTGGCTACCAAGATGACTTCCTGCTGTACCTGGACCCTCACTACTGCCAGCCCACTGTGGATGTCA GCCAGGCCGACTTCCCCCTGGAGTCCTTCCACTGCACCTCGCCCCGCAAGATGGCCTTTGCCAAGATGGA CCCAAGCTGTACCGTGGGCTTCTATGCTGGAGACAGGAAGGAGTTTGAGACACTCTGCTCAGAGCTGACC AGGGTCCTCAGCTCCTCCTCAGCCACAGAGCGGTACCCCATGTTCACCCTGGCCGAGGGCCATGCTCAGG ACCACAGCCTGGACGACCTCTGCTCCCAGCTCGCCCAGCCCACACTCCGGCTCCCTCGCACAGGGCGGCT CCTCAGGGCCAAACGCCCCAGCTCTGAGGACTTTGTGTTTTTA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

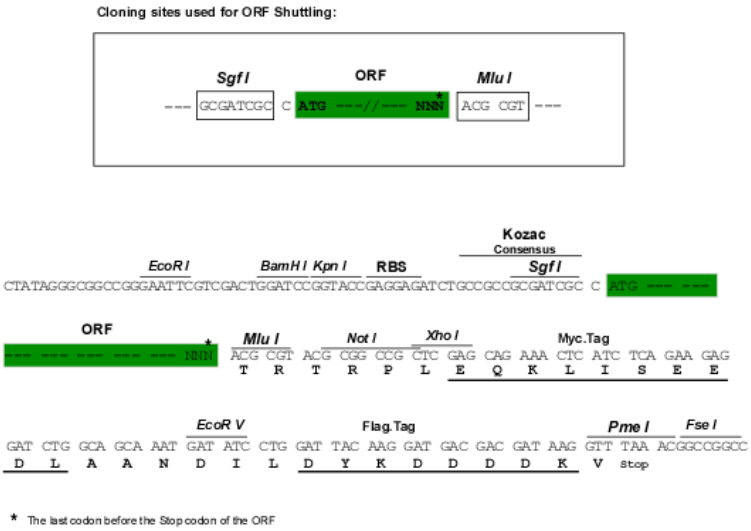
>RC238050 representing NM_001281504
Red=Cloning site Green=Tags(s)

MQVLHLAGRCPYVSPGWVVKSRTSFSKISSIHLCGRRYRFEGEGDIQRFQRDFVSRLWLTYRRDFPPLPG
GCLTSDCGWGCMLRSGQMMLAQGLLLHFLPRDWTWAEGMGLGPPELSGSASPSRYHGPARWMPPRWAQGA
PELEQERRHRQIVSWFADHPRAPFGLHRLVELGQSSGKKAGDWYGPSLVAHILRKAVESCSDVTRLVVYV
SQDCTVYKADVARLVARPDPTAEWKSVVILVPVRLGGETLNPVYVPCVKELLRCELCLGIMGGKPRHSLY
FIGYQDDFLLYLDPHYCQPTVDVSQADFPLESFHCTSPRKMAFAKMDPSCTVGFYAGDRKEFETLCSELT
RVLSSSSATERYPMFTLAEGHAQDHSLDDLCSQLAQPTLRLPRTGRLLRAKRPSSEDFVFL

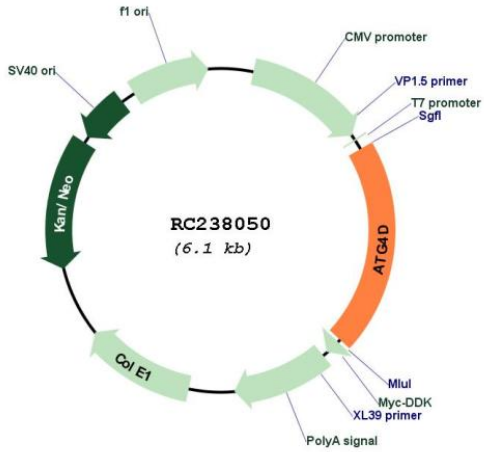
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001281504

ORF Size:	1233 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_001281504.2
RefSeq Size:	2070 bp
RefSeq ORF:	1236 bp
Locus ID:	84971
UniProt ID:	Q86TL0
Cytogenetics:	19p13.2
Protein Pathways:	Regulation of autophagy
MW:	46.9 kDa
Gene Summary:	Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene belongs to the autophagy-related protein 4 (Atg4) family of C54 endopeptidases. Members of this family encode proteins that play a role in the biogenesis of autophagosomes, which sequester the cytosol and organelles for degradation by lysosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]