

Product datasheet for **RG235466**

Apg12 (ATG12) (NM_001277783) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Apg12 (ATG12) (NM_001277783) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATG12
Synonyms:	APG12; APG12L; FBR93; HAPG12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235466 representing NM_001277783. Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC**GCGATCGCC**
ATGGCGGAGGAGCCGAGTCTGTGTTGCAGCTTCTACTTCAATTGCTGCTGGAGGGGAAGGACTTACG
GATGTCTCCCCAGAAACAACCACCCCGAGCCCCGCTTCCGCTGCAGTTTCCCCGGGAACAGAGGAA
CCTGCTGGCGACACCAAGAAAAAATTTATTTATGTGAATCAGTCCTTTGCTCCTTCCCCAGACCAAGA
AGTTGGAACTCTCTA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence: >Peptide sequence encoded by RG235466
Blue=ORF Red=Cloning site Green=Tag(s)

MAEEPQSVLQLPSTIAAGGGLTDVSPETTTPEPPSSAAVSPGTEEPAGDTKKKIYLCESVLCSPRPR
SWNSL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVI GDFKVMGTGFPEP
SVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHP SILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

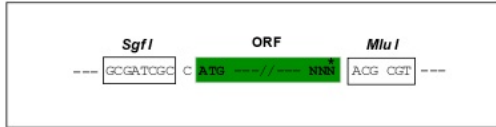
Restriction Sites: SgfI-MluI



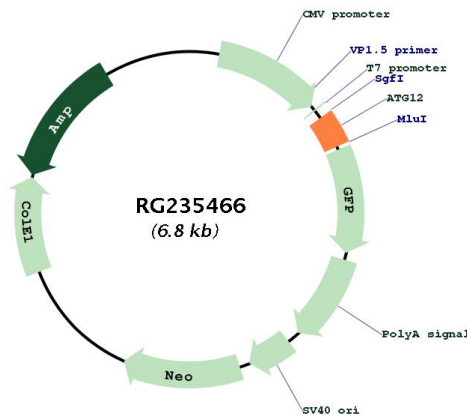
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Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001277783

ORF Size: 222 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).
RefSeq:	NM_001277783.2
RefSeq Size:	4193 bp
RefSeq ORF:	225 bp
Locus ID:	9140
UniProt ID:	O94817
Cytogenetics:	5q22.3
Protein Pathways:	Regulation of autophagy, RIG-I-like receptor signaling pathway
MW:	8.2 kDa
Gene Summary:	Autophagy is a process of bulk protein degradation in which cytoplasmic components, including organelles, are enclosed in double-membrane structures called autophagosomes and delivered to lysosomes or vacuoles for degradation. ATG12 is the human homolog of a yeast protein involved in autophagy (Mizushima et al., 1998 [PubMed 9852036]).[supplied by OMIM, Mar 2008]