

## OriGene Technologies, Inc.

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## Product datasheet for RR205679L3V

## Atg12 (NM\_001038495) Rat Tagged ORF Clone Lentiviral Particle

## **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Atg12 (NM_001038495) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Atg12
Synonyms:	Apg12l
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_001038495
ORF Size:	423 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR205679).
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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<u>NM 001038495.1, NP 001033584.1</u>
RefSeq Size:	2590 bp
RefSeq ORF:	426 bp
Locus ID:	361321
UniProt ID:	<u>Q2TBJ5</u>
Cytogenetics:	18q11



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Gene Summary:Ubiquitin-like protein involved in autophagy vesicles formation. Conjugation with ATG5<br/>through a ubiquitin-like conjugating system involving also ATG7 as an E1-like activating<br/>enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-<br/>ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 family<br/>proteins and their association to the vesicle membranes. The ATG12-ATG5 conjugate also<br/>regulates negatively the innate antiviral immune response by blocking the type I IFN<br/>production pathway through direct association with RARRES3 and MAVS. Plays also a role in<br/>translation or delivery of incoming viral RNA to the translation apparatus (By similarity).<br/>[UniProtKB/Swiss-Prot Function]

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