

## Product datasheet for **KN301740**

### Atg5 Mouse Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Atg5
Locus ID:	11793
Components:	<p><b>KN301740G1</b>, Atg5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AAGATGTGCTTCGAGATGTG</p> <p><b>KN301740G2</b>, Atg5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AACTTGCTTTACTCTCTATC</p> <p><b>KN301740D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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GGGGATCATG TAACTCGCCT T

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**GE100003**, scramble sequence in pCas-Guide vector

**Disclaimer:**

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

**RefSeq:**

[NM\\_053069](#)

**UniProt ID:**

[Q99J83](#)

**Synonyms:**

2010107M05Rik; 3110067M24Rik; Apg5l; Atg5l; AW319544; C88337; Paddy

**Summary:**

The protein encoded by this gene, in combination with autophagy protein 12, functions as an E1-like activating enzyme in a ubiquitin-like conjugating system. The encoded protein is involved in several cellular processes, including autophagic vesicle formation, mitochondrial quality control after oxidative damage, negative regulation of the innate antiviral immune response, lymphocyte development and proliferation, MHC II antigen presentation, adipocyte differentiation, and apoptosis. Two transcript variants encoding different protein isoforms have been found for this gene. [provided by RefSeq, Sep 2015]

Product images:

