

Product datasheet for **KN301741**

Atg7 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:	Atg7
Locus ID:	74244
Components:	<p>KN301741G1, Atg7 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCCTCACCCTGTGCTCGT</p> <p>KN301741G2, Atg7 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCCATGAGGCTTTCCTCATC</p> <p>KN301741D, 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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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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ACAGGCATCG TGGTGTACG CTCGTCGTTT GGTATGGCTT CATTACGCTC CGTTCCCAA CGATC

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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_001253717](#), [NM_001253718](#), [NM_028835](#)

UniProt ID:

[Q9D906](#)

Synonyms:

1810013K23Rik; Agp7; Apg7l; Atg7l; Gm21553

Summary:

This gene encodes an E1-like activating enzyme that is essential for autophagy and cytoplasmic to vacuole transport. The encoded protein is also thought to modulate p53-dependent cell cycle pathways during prolonged metabolic stress. It has been associated with multiple functions, including axon membrane trafficking, axonal homeostasis, mitophagy, adipose differentiation, and hematopoietic stem cell maintenance. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Product images:

