

Product datasheet for **KN306224**

Gaa 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:	Gaa
Locus ID:	14387
Components:	<p>KN306224G1, Gaa gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAACCACGGAGTTCGAACAG</p> <p>KN306224G2, Gaa gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTGACTACAGCGGTCATCCT</p> <p>KN306224D, 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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 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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_001159324](#), [NM_008064](#)

UniProt ID:

[P70699](#)

Synonyms:

E430018M07Rik

Summary:

This gene encodes a lysosomal acid glucosidase that is involved in the degradation of glycogen. The encoded preproprotein undergoes proteolytic processing to generate a mature enzyme that cleaves alpha-1-4 and alpha-1-6 glycosidic bonds of glycogen, maltose and intermediate oligosaccharides within the lysosome. Mice lacking the encoded protein exhibit symptoms similar to human Pompe syndrome such as accumulation of glycogen in cardiac and skeletal muscle lysosomes resulting in reduced mobility and strength. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Nov 2015]

Product images:

