

Product datasheet for **KN313676**

Ppargc1a 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:	Ppargc1a
Locus ID:	19017
Components:	<p>KN313676G1, Ppargc1a gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGTGACATAGAGGTGAGCTG</p> <p>KN313676G2, Ppargc1a gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCAGATGCAATGATTCCTGG</p> <p>KN313676D, 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

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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_008904](#), [NR_027710](#), [NR_132764](#)

UniProt ID:

[O70343](#)

Synonyms:

A830037N07Rik; ENSMUSG00000079510; Gm11133; PGC-1; Pgc-1alpha; Pgc1; Pgc01; PPARGC-1-alpha; Ppargc1

Summary:

This gene encodes a transcriptional coactivator that induces and coordinates gene expression regulating mitochondrial biogenesis, respiration, hepatic gluconeogenesis, thermogenic program in brown fat and muscle fiber-type switching. Mice lacking the encoded protein exhibit reduced thermogenic capacity, hyperactivity and resistance to diet-induced obesity. Mice lacking the encoded protein specifically in the heart exhibit peripartum cardiomyopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Product images:

