

Product datasheet for **KN308170**

Igf1 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:	Igf1
Locus ID:	16000
Components:	<p>KN308170G1, Igf1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGATCTTAAATAATTGAGT</p> <p>KN308170G2, Igf1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCTTAAATAATTGAGTTGGA</p> <p>KN308170D, 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_001111274](#), [NM_001111275](#), [NM_001111276](#), [NM_010512](#), [NM_184052](#)

UniProt ID:

[P05017](#)

Synonyms:

C730016P09Rik; Igf-1; Igf-I

Summary:

This gene encodes a member of the insulin-like growth factor (IGF) family of proteins that promote growth and development during fetal and postnatal life. This gene is predominantly expressed in the liver and the encoded protein undergoes proteolytic processing to generate a disulfide-linked mature polypeptide. Transgenic disruption of this gene in mice results in reduced postnatal survival and severe growth retardation. Mice lacking the encoded protein exhibit generalized organ hypoplasia including underdevelopment of the central nervous system and developmental defects in bone, muscle and reproductive systems. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate mature protein. [provided by RefSeq, Sep 2015]

Product images:

