

Product datasheet for **KN203027**

G protein coupled receptor 30 (GPER1) Human 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:	G protein coupled receptor 30
Locus ID:	2852
Components:	<p>KN203027G1, G protein coupled receptor 30 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GATGTGACTTCCCAAGCCCCG</p> <p>KN203027G2, G protein coupled receptor 30 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGGGCCTGGAGATGTACCC</p> <p>KN203027D, 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
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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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_001031682](#), [NM_001039966](#), [NM_001098201](#), [NM_001505](#)

UniProt ID:

[Q99527](#)

Synonyms:

CMKRL2; FEG-1; GPCR-Br; LERGU; LERGU2; MGC99678

Summary:

This gene encodes a multi-pass membrane protein that localizes to the endoplasmic reticulum and a member of the G-protein coupled receptor 1 family. This receptor binds estrogen and activates multiple downstream signaling pathways, leading to stimulation of adenylate cyclase and an increase in cyclic AMP levels, while also promoting intracellular calcium mobilization and synthesis of phosphatidylinositol 3,4,5-trisphosphate in the nucleus. This protein therefore plays a role in the rapid nongenomic signaling events widely observed following stimulation of cells and tissues with estrogen. This receptor has been shown to play a role in diverse biological processes, including bone and nervous system development, metabolism, cognition, male fertility and uterine function. [provided by RefSeq, Aug 2017]

Product images:

