

## **Product datasheet for KN203027BN**

#### OriGene Technologies, Inc.

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## **G** protein coupled receptor 30 (GPER1) Human Gene Knockout Kit (CRISPR)

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

**Donor DNA:** mBFP-Neo

**Symbol:** G protein coupled receptor 30

**Locus ID:** 2852

**Components:** KN203027G1, G protein coupled receptor 30 gRNA vector 1 in pCas-Guide CRISPR vector

(GE100002)

KN203027G2, G protein coupled receptor 30 gRNA vector 2 in pCas-Guide CRISPR vector

(GE100002)

KN203027BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

**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:**

### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter