

## Product datasheet for **KN222436**

### GALR2 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:	GALR2
Locus ID:	8811
Components:	<p><b>KN222436G1</b>, GALR2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGGGGCACGATGACCGCCTC</p> <p><b>KN222436G2</b>, GALR2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCCCGCCTGGCTCGCGTTCC</p> <p><b>KN222436D</b>, 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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 GGGGATCATG TAACTCGCCT T

**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\\_003857](#)

**UniProt ID:**

[O43603](#)

**Synonyms:**

GAL2-R; GALNR2; GALR-2

**Summary:**

Galanin is an important neuromodulator present in the brain, gastrointestinal system, and hypothalamopituitary axis. It is a 30-amino acid non-C-terminally amidated peptide that potently stimulates growth hormone secretion, inhibits cardiac vagal slowing of heart rate, abolishes sinus arrhythmia, and inhibits postprandial gastrointestinal motility. The actions of galanin are mediated through interaction with specific membrane receptors that are members of the 7-transmembrane family of G protein-coupled receptors. GALR2 interacts with the N-terminal residues of the galanin peptide. The primary signaling mechanism for GALR2 is through the phospholipase C/protein kinase C pathway (via Gq), in contrast to GALR1, which communicates its intracellular signal by inhibition of adenylyl cyclase through Gi. However, it has been demonstrated that GALR2 couples efficiently to both the Gq and Gi proteins to simultaneously activate 2 independent signal transduction pathways. [provided by RefSeq, Jul 2008]

**Product images:**
