

## **Product datasheet for KN222436LP**

#### OriGene Technologies, Inc.

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## **GALR2 Human Gene Knockout Kit (CRISPR)**

## **Product data:**

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

**Format:** 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

**Donor DNA:** Luciferase-Puro

Symbol: GALR2 Locus ID: 8811

**Components: KN222436G1**, GALR2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN222436G2**, GALR2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN222436LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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:** <u>NM 003857</u> **UniProt ID:** 043603

**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 20081





# **Product images:**

#### Donor Vector Edited Chromosome



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