

## **Product datasheet for TR312844**

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## **GALR2 Human shRNA Plasmid Kit (Locus ID 8811)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: GALR2 Human shRNA Plasmid Kit (Locus ID 8811)

Locus ID: 8811

**Synonyms:** GAL2-R; GALNR2; GALR-2

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: GALR2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

8811). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 003857, NM 003857.2, NM 003857.3, BC069130, BC074914, BC074915, BC109051,

BC109052, NM 003857.4

UniProt ID: 043603

**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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).