

Product datasheet for RC222436L3

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OriGene Technologies, Inc.

GALR2 (NM_003857) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: GALR2 (NM_003857) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: GALR2

Synonyms: GAL2-R; GALNR2; GALR-2

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

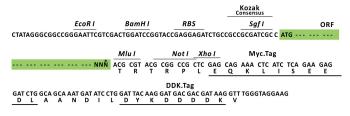
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC222436).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_003857

ORF Size: 1161 bp



GALR2 (NM_003857) Human Tagged Lenti ORF Clone - RC222436L3

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 003857.2</u>

RefSeq Size: 1309 bp
RefSeq ORF: 1164 bp
Locus ID: 8811

 UniProt ID:
 O43603

 Cytogenetics:
 17q25.1

Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Neuroactive ligand-receptor interaction

MW: 41.5 kDa

Gene Summary: Galanin is an important neuromodulator present in the brain, gastrointestinal system, and

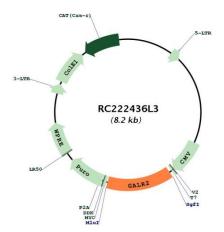
hypothalamopituitary axis. It is a 30-amino acid non-C-terminally amidated peptide that potently stimulates growth hormone secretion, inhibits cardiac vagal slowing of heart rate, abolishes sinus arrhythmia, and inhibits postprandial gastrointestinal motility. The actions of galanin are mediated through 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

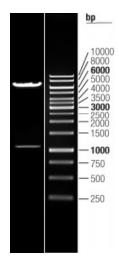
RefSeq, Jul 2008]



Product images:



Circular map for RC222436L3



Double digestion of RC222436L3 using Sgfl and Mlul $\,$