

### Product datasheet for RC207379L3

#### OriGene Technologies, Inc.

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#### Metabotropic Glutamate Receptor 3 (GRM3) (NM 000840) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Metabotropic Glutamate Receptor 3 (GRM3) (NM\_000840) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

**Symbol:** Metabotropic Glutamate Receptor 3

Synonyms: GLUR3; GPRC1C; mGlu3; MGLUR3

Mammalian Cell

Selection:

Puromycin

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

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

ORF Nucleotide The ORF insert of this close

Sequence:

The ORF insert of this clone is exactly the same as(RC207379).

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

ACCN: NM\_000840

ORF Size: 2637 bp





# Metabotropic Glutamate Receptor 3 (GRM3) (NM\_000840) Human Tagged Lenti ORF Clone – RC207379L3

**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 000840.2</u>, <u>NP 000831.2</u>

 RefSeq Size:
 4260 bp

 RefSeq ORF:
 2640 bp

 Locus ID:
 2913

**UniProt ID:** 

**Cytogenetics:** 7q21.11-q21.12

**Domains:** 7tm 3, ANF receptor

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

Q14832

**MW:** 98.9 kDa

Gene Summary: L-glutamate is the major excitatory neurotransmitter in the central nervous system and

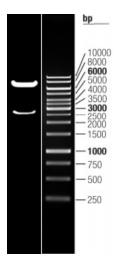
activates both ionotropic and metabotropic glutamate receptors. Glutamatergic

neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. The metabotropic glutamate receptors are a family of G protein-coupled receptors, that have been divided into 3 groups on the basis of sequence homology, putative signal transduction mechanisms, and pharmacologic properties. Group I includes GRM1 and GRM5 and these receptors have been shown to activate phospholipase C. Group II includes GRM2 and GRM3 while Group III includes GRM4, GRM6, GRM7 and GRM8. Group II and III receptors are linked to the inhibition of the cyclic AMP cascade but differ in

their agonist selectivities. [provided by RefSeq, Jul 2008]



## **Product images:**



Double digestion of RC207379L3 using Sgfl and Mlul  $\,$