

## Product datasheet for RC227736L3

## OriGene Technologies, Inc.

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## Metabotropic Glutamate Receptor 5 (GRM5) (NM\_001143831) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Metabotropic Glutamate Receptor 5 (GRM5) (NM 001143831) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: GRM5

**Synonyms:** GPRC1E; mGlu5; MGLUR5; PPP1R86

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

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

Cell Selection: Puromycin

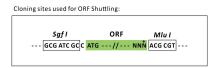
ORF Nucleotide The ORF in

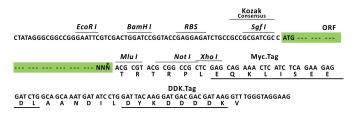
Sequence:

The ORF insert of this clone is exactly the same as(RC227736).

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_001143831

ORF Size: 3636 bp





## Metabotropic Glutamate Receptor 5 (GRM5) (NM\_001143831) Human Tagged ORF Clone – RC227736L3

**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 001143831.1</u>

RefSeq ORF: 3639 bp Locus ID: 2915 UniProt ID: P41594

**Cytogenetics:** 11q14.2-q14.3

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

Protein Pathways: Calcium signaling pathway, Gap junction, Huntington's disease, Long-term depression, Long-

term potentiation, Neuroactive ligand-receptor interaction

MW: 132.47 kDa

**Gene Summary:** This gene encodes a member of the G-protein coupled receptor 3 protein family. The

encoded protein is a metabatropic glutamate receptor, whose signaling activates a

phosphatidylinositol-calcium second messenger system. This protein may be involved in the regulation of neural network activity and synaptic plasticity. Glutamatergic neurotransmission

is involved in most aspects of normal brain function and can be perturbed in many

neuropathologic conditions. A pseudogene of this gene has been defined on chromosome 11. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]