

## Product datasheet for **RG239765**

### Metabotropic Glutamate Receptor 1 (GRM1) (NM\_001278067) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Metabotropic Glutamate Receptor 1 (GRM1) (NM_001278067) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRM1
Synonyms:	GPRC1A; MGLU1; MGLUR1; PPP1R85; SCA44; SCAR13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG239765 representing NM\_001278067.  
Blue=ORF Red=Cloning site Green=Tag(s)

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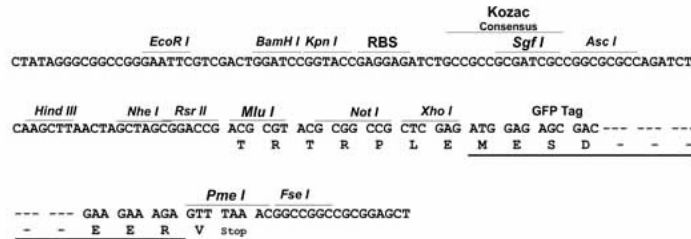
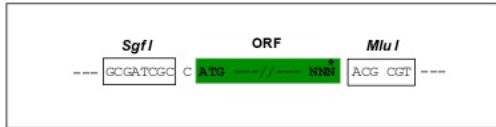
**Protein Sequence:** >Peptide sequence encoded by RG239765  
 Blue=ORF Red=Cloning site Green=Tag(s)

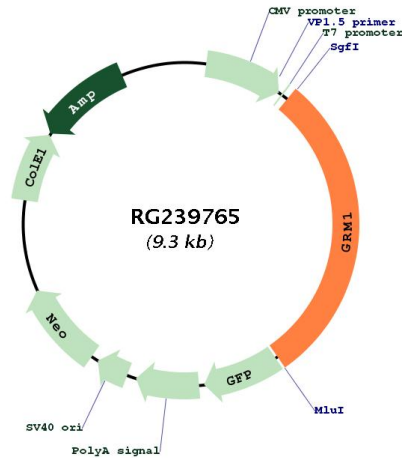
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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


<b>ACCN:</b>	NM_001278067
<b>ORF Size:</b>	2724 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001278067.1</a> , <a href="#">NP_001264996.1</a>
<b>RefSeq Size:</b>	6672 bp
<b>RefSeq ORF:</b>	2727 bp
<b>Locus ID:</b>	2911
<b>UniProt ID:</b>	<a href="#">Q13255</a>
<b>Cytogenetics:</b>	6q24.3
<b>Protein Families:</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Gap junction, Long-term depression, Long-term potentiation, Neuroactive ligand-receptor interaction
<b>MW:</b>	101.9 kDa

**Gene Summary:**

This gene encodes a metabotropic glutamate receptor that functions by activating phospholipase C. 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 canonical alpha isoform of the encoded protein is a disulfide-linked homodimer whose activity is mediated by a G-protein-coupled phosphatidylinositol-calcium second messenger system. This gene may be associated with many disease states, including schizophrenia, bipolar disorder, depression, and breast cancer. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, May 2013]