

## Product datasheet for **SC119648**

### Metabotropic Glutamate Receptor 5 (GRM5) (NM\_000842) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Metabotropic Glutamate Receptor 5 (GRM5) (NM_000842) Human Untagged Clone
Tag:	Tag Free
Symbol:	Metabotropic Glutamate Receptor 5
Synonyms:	GPRC1E; mGlu5; MGLUR5; PPP1R86
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Restriction Sites:	NotI-NotI
ACCN:	NM_000842
Insert Size:	6000 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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 may be unstable or toxic at high copy number in common E. coli strain. We recommend using a lower copy number E. coli strain, such as CopyCutter strain ( <a href="http://www.epibio.com/item.asp?ID=435">http://www.epibio.com/item.asp?ID=435</a> ) for transformation and plasmid preparation. Please be aware that the DNA yield could be low. Additional aliquots of this clone can be ordered from OriGene.
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<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>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000842.1</a> , <a href="#">NP_000833.1</a>
<b>RefSeq Size:</b>	4518 bp
<b>RefSeq ORF:</b>	3543 bp
<b>Locus ID:</b>	2915
<b>UniProt ID:</b>	<a href="#">P41594</a>
<b>Cytogenetics:</b>	11q14.2-q14.3
<b>Domains:</b>	7tm_3, ANF_receptor
<b>Protein Families:</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Gap junction, Huntington's disease, Long-term depression, Long-term potentiation, Neuroactive ligand-receptor interaction
<b>Gene Summary:</b>	<p>This gene encodes a member of the G-protein coupled receptor 3 protein family. The encoded protein is a metabotropic 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]</p> <p>Transcript Variant: This variant (b) has a longer 5' UTR and lacks an in-frame exon in the 3' coding region, compared to variant a. The encoded isoform (b, also known as mGluR5a) is shorter, compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>