

Product datasheet for **SC337657**

Metabotropic Glutamate Receptor 1 (GRM1) (NM_001278066) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Metabotropic Glutamate Receptor 1 (GRM1) (NM_001278066) Human Untagged Clone
Tag:	Tag Free
Symbol:	GRM1
Synonyms:	GPRC1A; MGLU1; MGLUR1; PPP1R85; SCA44; SCAR13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001278066, the custom clone sequence may differ by one or more nucleotides

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ATGGTCGGGCTCCTTTTGTTTTTTTTCCACGGATCTTTTTGGAGGTGTCCTTCTCCCCAGAAGCCCCG
GCAGGAAAGTGTGCTGCGCAGGAGCGTCGCTCAGCGCTCGGTGGCCAGAATGGACGGAGATGTCATCAT
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Restriction Sites: Sgfl-Mlul
ACCN: NM_001278066

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	NM_001278066.1 , NP_001264995.1
RefSeq Size:	6757 bp
RefSeq ORF:	2721 bp
Locus ID:	2911
UniProt ID:	Q13255
Cytogenetics:	6q24.3
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Calcium signaling pathway, Gap junction, Long-term depression, Long-term potentiation, Neuroactive ligand-receptor interaction
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (5) contains an alternate internal exon in the 3' coding region and uses an alternate splice site in the 3'-terminal exon, compared to variant 3. The encoded isoform (beta) is shorter and contains a distinct C-terminus, compared to isoform alpha. Isoform beta has a different subcellular distribution than isoform alpha and may be functionally distinct due to differential G-protein coupling of its novel C-terminal sequence (PMID: 9076744). Variants 4 and 5 encode the same isoform.</p>