

## Product datasheet for **SC336953**

### Metabotropic Glutamate Receptor 4 (GRM4) (NM\_001282847) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Metabotropic Glutamate Receptor 4 (GRM4) (NM_001282847) Human Untagged Clone
Tag:	Tag Free
Symbol:	GRM4
Synonyms:	GPRC1D; mGlu4; MGLUR4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



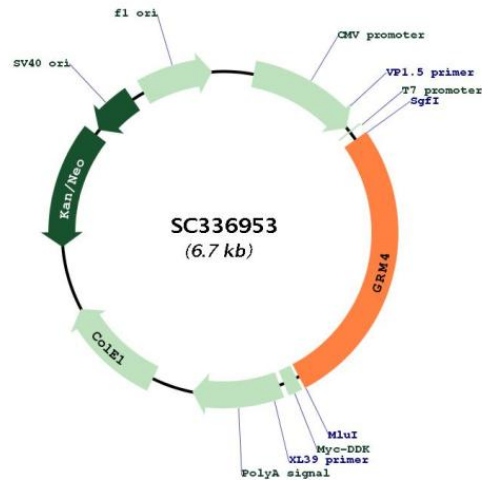
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**Fully Sequenced ORF:** >SC336953 representing NM\_001282847.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGGCTCTGACAGCTGGGGCTCCAAGATTGCACCTGTGCTGCACCTGGAGGAGGTGGCTGAGGGTGTCT
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TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_001282847

**Insert Size:** 1815 bp

**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:**

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\\_001282847.1](#)

**RefSeq Size:** 7217 bp

**RefSeq ORF:** 1815 bp

**Locus ID:** 2914

**UniProt ID:** [Q14833](#)

**Cytogenetics:** 6p21.31

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

**Protein Pathways:** Neuroactive ligand-receptor interaction, Taste transduction

**MW:** 68 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. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2012]

Transcript Variant: This variant (8) uses an alternate 5' structure and thus differs in the 5' UTR and 5' coding region compared to variant 1. These differences cause translation initiation at a downstream AUG and result in an isoform (8) with a shorter N-terminus, compared to isoform 1. 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.