

Product datasheet for **RC234811**

Metabotropic Glutamate Receptor 4 (GRM4) (NM_001256812) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Metabotropic Glutamate Receptor 4 (GRM4) (NM_001256812) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Metabotropic Glutamate Receptor 4
Synonyms:	GPRC1D; mGlu4; MGLUR4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC234811 representing NM_001256812
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCATGTAAGATACCCAGATCAGCTACGCCTCCACAGCGCCAGACCTGAGTGACAACAGCCGCTACG
 ACTTCTTCTCCCGGTGGTGCCCTCGGACACGTACCAGGCCAGGCCATGGTGGACATCGTCCGTGCCCT
 CAAGTGGAACTATGTGTCCACAGTGGCCTCGGAGGGCAGCTATGGTGAGAGCGGTGTGGAGGCCCTCATC
 CAGAAGTCCCCTGAGGACGGGGCGTGTGCATCGCCAGTCCGGTGAAGATACCACGGGAGCCCAAGGCAG
 GCGAGTTCGACAAGATCATCCGCCGCTCCTGGAGACTTCGAACGCCAGGGCAGTCATCATCTTTGCCAA
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 CGATCCTCCCAAGAGGATGTCCTGACGAGGCTTCGACCGCTACTTCTCCAGCCGCACGCTGGACAACAA
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 TGACCACCTGCACCTTAGAATAGAGCGGATGACTGGCCGGGAGCGGGCAGCAGCTGCCCGCTCCATC
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 CGGTCTCGGTGAGTCTGAGCGCCTCGGTGTCCCTGGGAATGCTCTACATGCCAAAGTCTACATCATCT
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 TCCAACAAGTTCACGCAGAAGGGCAACTCCGGCCCAACGGAGAGGCCAAGTCTGAGCTCTGCGAGAACC
 TTGAGGCCCCAGCGCTGGCCACCAACAGACTTACGTCACTTACACCAACCATGCAATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC234811 representing NM_001256812
Red=Cloning site Green=Tags(s)

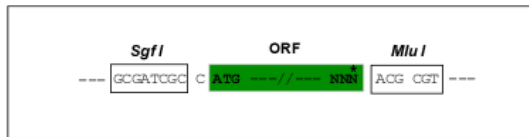
MCKIPQISYASTAPDLSDNSRYDFFSRVVPSTDYQAQAMVDIVRALKWNYVSTVASEGSYGESGVAEFI
 QKSREDGGVCIQSVKIPREPKAGEFDKIIRLLETSNARAVIIFANEDDIRRVLEAARRANQTGHFFWM
 GSDSWGSKIAPVLHLEEVAEGAVTILPKRMSVRGFDYFSSRTLNNRRNIWFAEFWEDNFHCKLSRHAL
 KKGSHVKKCTNRERIGQDSAYEQEGKVQFVIDAVYAMGHALHAMHRDLCPGRVGLCPRMDPVDGTLLKY
 IRNVNFSGIAGNPVTFNENGDAPEGYDIYQYQLRNDSAEYKVIKSWTDHLHLRIERMHWPGSQQLPRSI
 CSLPCQPGERKKTVKGMPCCWHCEPCTGYQYQVDRYTCKTCPYDMRPTENRTGCRPIPIIKLEWGSWAV
 LPLFLAVVGIAATLFVVITFVRYNDTPIVKASGRELSYVLLAGIFLCYATTFMLIAEPDLGTCSLRRIFL
 GLGMSISYAALLTKTNRIYRIFEQGRSVSAPRFISPASQLAITFSLISLQLLGICVWFVDPSPHSVVDF
 QDQRTLDPRFARGVLKCDISDLSLICLLGYSMLLMVTCTVYAIKTRGVPETFNEAKPIGFTMYTTCIVWL
 AFIPFIFFGTSQSADKLYIQTTTLTVSVLSASVSLGMLYMPKVYIILFHPEQNPVKRKRSLKAVVTAATM
 SNKFTQKGNFRPNGEAKSELNLEAPALATKQTYVVTYNHAI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001256812

ORF Size: 2229 bp

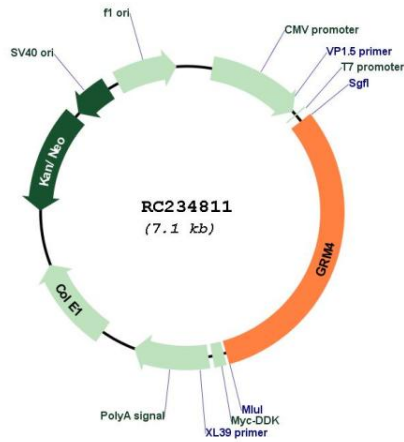
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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_001256812.2 , NP_001243741.1
RefSeq Size:	6518 bp
RefSeq ORF:	2232 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:	84 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC234811