

Product datasheet for **MC223835**

Grm5 (NM_001081414) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grm5 (NM_001081414) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Grm5
Synonyms:	6430542K11Rik; AI850523; Glu5R; Gprc1e; mGluR5; mGluR5b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223835 representing NM_001081414 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTCTTCTGTTGATTCTGTCAGTCCTACTTCTGAAAGAAGATGTACGAGGAAGTGCACAGTCCAGTG
AGAGGAGGGTGGTGGCTCACATGCCAGGTGACATTATTATTGGAGCTCTTCTCGGTCCACCACCAACC
AACTGTGGACAAAGTTCATGAGAGGAAGTGTGGGCGAGTCCGTGAGCAGTATGGCATTAGAGAGTGAA
GCCATGCTGCATACCTTGGAAAGGATCAATTCAGATCCCACACTTTGCCAACATCACACTAGGCTGTG
AGATAAGAGATTCTGCTGGCATTCTGCTGTGGCCCTAGAGCAAAGCATTGAGTTATAAGGGATCCCT
CATCTCTTCGGAAGAGGAAGAAGGCTTGGTACGCTGTGTAGATGGCTCTTCTCCTCCGCTCCAAGAAA
CCCATAGTGGGAGTCATTGGGCCTGGCTCGAGTTCTGTGGCCATTCAAGTTCAGAACTTGCTCCAGCTTT
TCAACATACCTCAGATTGCTTACTCTGCAACTAGCATGGATTTGAGTGACAAGACTCTATTCAAGTACTT
CATGAGGGTGTACCTTCGGATGCCAGCAAGCCGAGCCATGGTAGACATAGTGAAGAGATACAAGTGG
ACTTATGTCTCAGCTGTGCACACAGAAGGCAACTATGGAGAAAGTGGGATGGAGGCTTTCAAAGATATGT
CAGCGAAGGAAGGGATTTGCATCGCCACTTTACAAAATCTACAGCAATGCTGGGGAACAGAGCTTTGA
CAAGCTGTTGAAAAGCTCAGAAGTCATTTACCTAAAGCCCGGTGGTAGCCTGCTTCTGTGAAGGCATG
ACAGTTCGAGGCTGCTCATGGCCATGAGACGCTTGGGCTAGCAGGGGAATTTCTACTTCTGGGCGAGT
ATGGCTGGGCTGACAGGTATGACGTGACAGATGGGTATCAGCGAGAAGCTGTGGTGGGATTACAATCAA
GCTCCAGTCTCCTGATGTCAAGTGGTTTGTGATTATTATCTGAAGCTCCGGCCAGAAAACAACTCAGA
AACCTTGGTTTCAAGAATTTGGCAGCATCGTTTTCAGTGCCGGCTAGAAGGGTTTGCACAGGAGAACA
GCAAGTACAACAAGACTTGAACAGTCTCTAACTCTGAGAACGCATCATGTTCAAGATTCAAAAATGGG
ATTTGTGATCAATGCAATCTATTCTATGGCTTATGGGCTCCACAACATGCAGATGTCCTGTGTCCAGGC
TATGCAGGCTCTGTGATGCAATGAAGCAATTGATGGGCGGAACTTTGGACTCCCTGATGAAAACCA
ACTTTACTGGAGTTCCGGAGATATGATTCTATTTGATGAAAATGGAGACTCTCCAGGAAGGTATGAAAT
AATGAATTTCAAGGAAATGGGAAAAGATTATTTGATTACATCAATGTTGGAAGTTGGGACAATGGGGAA



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TTAAAAATGGATGATGATGAAGTGTGGTCCAAGAAAAAT AACATCATCAGATCTGTGTGCAGTGAACCGT
GTGAGAAAGGACAGATAAAGGTGATCCGGAAGGGAGAAGT CAGCTGTTGTTGGACCTGCACACCTTGTA
GGAGAATGAGTATGTTTTGATGAGTACACCTGCAAGGCGTGCCAACCTGGGGTCTGGCCCACTGACGAC
TTGACAGGTTGTGATTTGATCCCAGTCCAGTATCTTCGATGGGGTGACCCCTGAGCCCAATTGCAGCTGTGG
TGTTTGCTGCCTCGGTCTGCTAGCCACCCTCTCGTTACTGTAATCTTCATCATTTATCGGGACTCC
AGTGGTCAAGTCTCCAGCAGGGAACCTGTCTACATTATCCTTGCTGGCATCTGCCTGGTACTTGTGT
ACCTTCTGCCTCATTGCAAAGCCAAACAGATTTACTGCTACCTTCAGAGAATTGGCATCGGTCTCTCTC
CAGCCATGAGCTACTCAGCCCTTGTAACGAAGACCAACCGTATTGCAAGGATTCTAGCTGGCAGCAAGAA
GAAGATCTGTACCAAAAAGCCCAGATTCATGAGCGCCTGTGCTCAGTTAGTGATCGCTTTTATTCTCATC
TGTATACAGTTGGGTATTATTGTGGCCCTCTTTATCATGGAGCCTCCGGATATAATGCATGACTATCCAA
GCATCCGAGAAGTCTACTTGATTGTAACACCACCAACCTAGGGGTTGTCACTCCTTGGATACAATGG
ATTATTGATTTTGTGAGTTGCACATTCTATGCGTTCAAGACCAGAAATGTTCCAGCCAACTTTAACGAGGCC
AAATATATTGCTTTCACCATGTACACAACCTGCATCATATGGCTGGCCTTTGTGCCTATCTACTTTGGCA
GCAACTACAAAATCATCACCATGTGTTTCTCAGTCAGCCTCAGTGCCACAGTGGCCCTGGGTTGCATGTT
TGTGCCGAAGGTGTACATCATCCTAGCCAAACCGAGAGAAATGTGCGCAGCGCCTTCAACACCTCTACA
GTGGTGCCGATGCACGTAGGAGATGGCAAAGTCATCATCCGCTGCCAGCAGATCCAGCAGCCTAGTCAACC
TGTGGAAGAGGAGGGGCTCGTCTGGGAAACCCTAAGCTCCAATGGAAAATCCGTGACTTGGGCCAGAA
TGAGAAGAGCACCCGGGGCAGCACCTGTGGCAGCGACTGTCTGTCCATATCAACAAGAAGGAGAACCCC
AACCAGACAGCAGTATCAAACCCTTCCCAAGAGCACAGAGAGCCGCGGGCAGGGTGCAGGGGCAGGTG
GTGGCTCTGGCCCCGGTGCAGCTGGTGTGGTAGCGCAGGATGCACAGCGACAGGCGGCCAGAGCCACC
AGACGCCGGCCCCAAGGCGCTTTATGATGTGCGCAGAGGAGAGGAGCGCTTCCAGCGGCTGCCAGGCCG
CGCTCGCCATCGCCATCAGTACGCTGAGCCACCTGGCAGGCTCGGCGGGCCGCACAGACGACGACGCGC
CGTCCGCTGCACCTCGGAGACCGCTGCACGCAGCAGCTCATCCAGGGCTCGCTCATGGAGCAGATTAGCAG
CGTGGTGACGCGCTTCAACGCCAACATCACCGAGCTCAACTCCATGATGTTGTCCACCGCGCTGCGCCG
GGGCCCTGGTACCCTATCTGCTCTTCTACCTGATCCCAAAGAGATCCAGCTGCCACGACCATGA
CGACCTTCGACAGAGATCCAGCCTCTGCCGGCCATCGAGGTGACCGGAGGAGCTCAGCCGGCGACAGGGCC
ATCACCTGCCAAGAGACGCCCGCAGGAGCTGAAGCCGCCCCAGGAAAACCGGATCTGGAGGAGCTGGT
GCCCTCACTCCACCATCGCCCTCAGGGACTCGGTGGACTCGGGGAGCACCACCCCAAACCTCCAGTCT
CCGAATCGGCCCTCTGCATCCCATCCTCTCCCAAATATGACACTCTCATCATCAGAGATTACACGCAGAG
TTCTTCATCGTTG TGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja2362_c10.zip

Restriction Sites: Sgfl-Mlul

ACCN: NM_001081414

Insert Size: 3516 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 custsupport@origene.com 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](#)

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_001081414.2](#), [NP_001074883.1](#)

RefSeq Size: 8428 bp

RefSeq ORF: 3516 bp

Locus ID: 108071

Cytogenetics: 7 D3

Gene Summary: G-protein coupled receptor for glutamate. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors. Signaling activates a phosphatidylinositol-calcium second messenger system and generates a calcium-activated chloride current. Plays an important role in the regulation of synaptic plasticity and the modulation of the neural network activity (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (a) lacks an alternate in-frame exon in the 3' coding region, compared to variant b. The resulting isoform (a) lacks a segment near the C-terminus, compared to isoform b. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.