

Product datasheet for MC223921

Grm5 (NM_001143834) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grm5 (NM_001143834) 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:	>MC223921 representing NM_001143834 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGGTCCTTCTGTTGATTCTGTCAGTCCTACTTCTGAAAGAAGATGTACGAGGAAGTGCACAGTCCAGTG
AGAGGAGGGTGGTGGCTCACATGCCAGGTGACATTATTATTGGAGCTCTTCTCGGTCCACCACCAACC
AACTGTGGACAAAGTTCATGAGAGGAAGTGTGGGCGAGTCCGTGAGCAGTATGGCATTAGAGAGTGGAA
GCCATGCTGCATACCTTGGAAAGGATCAATTCAGATCCCACACTTTGCCAACATCACACTAGGCTGTG
AGATAAGAGATTCTGCTGGCATTCTGCTGTGGCCCTAGAGCAAAGCATTGAGTTATAAGGGATCCCT
CATCTCTTCGGAAGAGGAAGAAGGCTTGGTACGCTGTGTAGATGGCTCTTCTCCTCCGCTCCAAGAAA
CCCATAGTGGGAGTCATTGGGCCTGGCTCGAGTTCTGTGGCCATTCAAGTTCAGAACTTGCTCCAGCTTT
TCAACATACCTCAGATTGCTTACTCTGCAACTAGCATGGATTTGAGTGACAAGACTCTATTCAAGTACTT
CATGAGGGTGTACCTTCGGATGCCAGCAAGCCGAGCCATGGTAGACATAGTGAAGAGATACAAGTGG
ACTTATGTCTCAGCTGTGCACACAGAAGGCAACTATGGAGAAAGTGGGATGGAGGCTTTCAAAGATATGT
CAGCGAAGGAAGGGATTGCATCGCCACTTTACAAAATCTACAGCAATGCTGGGAACAGAGCTTTGA
CAAGCTGTTGAAAAGCTCAGAAGTCATTTACCTAAAGCCCGGTGGTAGCCTGCTTCTGTGAAGGCATG
ACAGTTCGAGGCTGCTCATGGCCATGAGACGCTTGGGCTAGCAGGGGAATTTCTACTTCTGGGCGAGT
ATGGCTGGGCTGACAGGTATGACGTGACAGATGGGTATCAGCGAGAAGCTGTGGTGGGATTACAATCAA
GCTCCAGTCTCCTGATGTCAAGTGGTTTGTGATTATTATCTGAAGCTCCGGCCAGAAAACAACTCAGA
AACCTTGGTTTCAAAGATTTTGGCAGCATCGTTTTCAGTGCCGGCTAGAAGGGTTTGCACAGGAGAACA
GCAAGTACAACAAGACTTGAACAGTCTCTAACTCTGAGAACGCATCATGTTCAAGATTCAAAATGGG
ATTTGTGATCAATGCAATCTATTCTATGGCTTATGGGCTCCACAACATGCAGATGTCCTGTGTCCAGGC
TATGCAGGCTCTGTGATGCAATGAAGCAATTGATGGGCGGAACTTTGGACTCCCTGATGAAAACCA
ACTTTACTGGAGTTCCGGAGATATGATTCTATTTGATGAAAATGGAGACTCTCCAGGAAGGTATGAAAT
AATGAATTTCAAGGAAATGGGAAAAGATTATTTGATTACATCAATGTTGGAAGTTGGGACAATGGGGAA



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TTAAAAATGGATGATGATGAAGTGTGGTCCAAGAAAAATACATCATCAGATCTGTGTGCAGTGAACCGT
 GTGAGAAAGGACAGATAAAGGTGATCCGGAAGGGAGAAGTCAGCTGTTGTTGGACCTGCACACCTTGTA
 GGAGAATGAGTATGTTTTGATGAGTACACCTGCAAGGCGTGCCAACTGGGGTCTGGCCACTGACGAC
 TTGACAGGTTGTGATTTGATCCCAGTCCAGTATCTTCGATGGGGTGACCTGAGCCATTGCAGCTGTGG
 TGTTTGCTGCCTCGGTCTGCTAGCCACCCTCTCGTTACTGTAATCTTCATCATTTATCGGGACTCC
 AGTGGTCAAGTCTCCAGCAGGGAACCTGTACATTATCCTTGCTGGCATCTGCCTGGTTACTTGTGT
 ACCTTCTGCCTCATTGCAAAGCCAAACAGATTTACTGTACTCTCAGAGAATTGGCATCGGTCTCTCTC
 CAGCCATGAGCTACTCAGCCCTTGTAACGAAGACCAACCGTATTGCAAGGATTCTAGCTGGCAGCAAGAA
 GAAGATCTGTACAAAAAGCCCAGATTCATGAGCGCCTGTGCTCAGTTAGTGATCGCTTTCATTCTCATC
 TGTATACAGTTGGGTATTATTGTGGCCCTCTTTATCATGGAGCCTCCGGATATAATGCATGACTATCCAA
 GCATCCGAGAAGTCTACTTGATTGTAACACCACCAACCTAGGGGTTGTCACTCCTTGGATACAATGG
 ATTATTGATTTTGTGAGTTGCATTTCTATGCGTTCAAGACCAGAAATGTTCCAGCCAACTTTAACGAGGCC
 AAATATATTGCTTTCACCATGTACACAACCTGCATCATATGGCTGGCCTTTGTGCCTATCTACTTTGGCA
 GCAACTACAAAATCATCACCATGTGTTTCTCAGTCAGCCTCAGTCCACAGTGGCCCTGGGTTGCATGTT
 TGTGCCAAGGTGTACATCATCTAGCCAAACCGAGAGAAATGTGCGCAGCGCCTTCAACACCTCTACA
 GTGGTGCCATGCACGTAGGAGATGGCAAGTCATCATCCGCTGCCAGCAGATCCAGCAGCCTAGTCAACC
 TGTGGAAGAGGAGGGGCTCGTCTGGGAAACCTAAGGTACAAAGACAGGAGACTGGCCAGCACAAAGTC
 GGAAATAGAGTGTTCACCCCCAAAGGGAGTATGGGGAATGGTGGGAGAGCAACAATGAGCAGCTCCAAT
 GGAAAAATCCGTGACTTGGGCCAGAAATGAGAAGAGCACCCGGGGGAGCAGCCTGTGGCAGCGACTGTCTG
 TCCATATCAACAAGAAGGAGAACCCCAACCAGACAGCAGTCATCAAACCTTCCCCAAGAGCACAGAGAG
 CCGCGGGCAGGGTGCAGGGGCAGGTGGTGGCTCTGGCCCCGTGCAGTGGTGTGGTAGCGCAGGATGC
 ACAGCGACAGGGCGCCAGAGCCACCAGACGCCGGCCCCAAGCGCTTTATGATGTCGACAGGCAGAGG
 AGCGCTTCCCAGCGCTGCCAGGCCGCTCGCCATCGCCATCAGTACGCTGAGCCACCTGGCAGGCTC
 GCGGGCCGCACAGACGACGACGCGCCGCTCGCTGCACTCGGAGACCGCTGCACGCAGCAGTCTCCAG
 GGCTCGCTCATGGAGCAGATTAGCAGCGTGGTACGCGCTTACCGCCAACATCACCGAGCTCAACTCCA
 TGATGTTGTCCACCGCGCTGCGCCGGGGCCCCCTGGTACCCCTATCTGCTTCTCTACCTGATCCCCAA
 AGAGATCCAGCTGCCACGACCATGACGACCTTCGACAGATCCAGCCTCTGCCGGCCATCGAGGTGACC
 GGAGGAGCTCAGCCGGGACAGGGCCATCACCTGCCCAAGAGACGCCCGCAGGAGCTGAAGCCGCCCCAG
 GAAAACCGGATCTGGAGGAGCTGGTGGCCCTCACTCCACCATCGCCCTCAGGGACTCGGTGGACTCGGG
 GAGCACCACCCAACTCTCCAGTCTCCGAATCGGCCCTCTGCATCCCATCCTCTCCAAATATGACT
 CTCATCATCAGAGATTACACGCAGATTCTTCATCGTTGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Chromatograms: https://cdn.origene.com/chromatograms/ja2141_f07.zip
- Restriction Sites: Sgfl-Mlul
- ACCN: NM_001143834
- Insert Size: 3612 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_001143834.1](#), [NP_001137306.1](#)

RefSeq Size: 8524 bp

RefSeq ORF: 3612 bp

Locus ID: 108071

UniProt ID: [Q3UVX5](#)

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 (b) represents the longer transcript and encodes the longer 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.