

## Product datasheet for **MR210868**

### Grm4 (NM\_001013385) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Grm4 (NM_001013385) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grm4
Synonyms:	Gprc1d; mGluR4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR210868 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCGGGAAGGGAGGCTGGGCTGGTGGTGGGCCCGGTGCCCTCTGCCTACTCCTCAGCCTTTATG  
 GCTCCTGGGTGCCTTCATCCCTAGGAAAAGCCCAAGGGTCACCCCCACATGAACTCTATCCGTATCGATGG  
 AGACATCACCCCTGGGAGGCCTGTTTCCCGTCCACGGTCCGCGGCTCCGAGGGCAAGGCCTGCGGCGAGTTG  
 AAGAAGGAGAAAGGTATCCACCGGCTGGAGGCCATGCTCTTTGCCCTGGACCGCATCAACAACGACCCGG  
 ACCTACTGCCAACATCACGTTGGGCGCCCGCATTCTGGACACCTGCTCAAGGGATACCCACGCCCTGGA  
 GCAGTCCCTGACCTTTGTGACGGCGCTCATCGAGAAGGACGGCACGGAGGTCCGCTGCGGCGAGCGGGGGC  
 CCACCCATCATACCAAGCCTGAACGAGTGGTGGGTGTCATCGGAGCTTCGGGGAGCTCCGTCTCGATCA  
 TGGTGGCCAAACATCCTCCGCTCTTCAAGATCCCCAGATCAGCTACGCCCTCCACGGCTCCCGACTTGAG  
 TGATAACAGCCGCTATGACTTCTTCTCCGGGTCTGCCCTCGGACACATACCAGGCCAGGCCATGGTG  
 GACATCGTCCGGGCCCTCAAGTGAAGTATGTGTCCACGCTGGCCTCAGAGGGTAGCTACGGCGAGAGCG  
 GCGTGGAGGCCTTTATCCAGAAGTCCCAGAGAACGGAGGCGTGTGCATTGCCAGTCGGTGAAGATTCC  
 ACGGGAACCCAAGACCGGGGAGTTTGACAAGATCATCAAACGCCTTCTGGAAACGTCCAATGCCAGAGCC  
 ATCATCATCTTTGCCAACGAGGATGATATCAGGAGGGTGTGGAGGCAGCGCGCAGGGCCAAACCAGACCG  
 GCCACTTCTTTGGATGGGTTCTGATAGCTGGGGCTCCAAGAGCGCCCCGTGCTGCGCCTTGAGGAAGT  
 GGCTGAAGGTGCAGTACCATTCTTCCAAGAGGACGCTGTGCGAGGGTTTGACCGATACTTCTCCAGC  
 CGCACGCTTGACAACAACAGGCGCAACATCTGGTTTGTGAGTTCTGGGAGGACAACCTCCATTGCAAGT  
 TGAGCCCGCACGCGCTCAAGAAGGGAAGCCACATCAAGAAGTGCACCAACCGAGAGCGCATCGGGCAGGA  
 CTCGGCCTACGAACAGGAGGGGAAGGTGCAAGTTGTGATCGACGCGGTGTACGCCATGGGCCATGCTCTG  
 CACGCCATGCATCGTGACCTGTGTCCCGCCGCGTAGGACTCTGCCCTCGAATGGACCCTGTGGATGGCA  
 CCCAGTGCTTAAGTACATCAGAAACGTCAACTTCTCAGGCATCGCCGGGAACCCGGTGACCTTCAACGA  
 GAACGGAGACGCGCCAGGGCGTTATGACATCTACCAGTACCAACGTGCAACGGCTCGGCTGAGTACAAG  
 GTCATCGGCTCATGGACAGACCACTTGACCTCAGAATAGAGCGGATGCAGTGGCCAGGGAGTGGCCAGC  
 AGCTGCCACGCTCCATCTGCAGCTGCCCTGCCAGCCAGGCGAGCGGAAGAAGACGGTGAAGGGCATGGC  
 TTGCTGCTGGCACTGCGAGCCCTGCACGGGTACCAGTACCAGGTGGACCCTACACCTGTAAGACCTGC  
 CCCTATGACATGGGCCCACGGAGAACCACGACGAGCTGCCAGCCATACCCATTGTAAGTTGGAGTGGG  
 ACTCACCTGGGCTGTGCTGCCCTCTTCTGGCTGTGGTGGGCATTGCTGCCACGCTGTTGCTGGTGGT  
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 GCGGGCATCTTTCTGTGATGCCACCCTTCTCATGATCGCAGAGCCTGACCTGGGGACCTGTTTAC  
 TCCGCCGATCTTCTGGGGCTTGCAATGAGCATCAGTACGCGGCCCTGCTGACCAAGACCAACCCGAT  
 CTACCGCATCTTTGAGCAGGGCAAGCGGTGGTCCAGCGCCACGGTTCATCAGCCCCGCTCGCAGCTG  
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 CATCTCGGACCTGCTCATCTGCCTCCTGGCTACAGCATGCTGATGGTACGTTACTGTGAT  
 GCCATCAAGACTCGAGGGTGCCTGAGACCTTCAATGAGGCCAAGCCATCGGCTTACCATGTACACCA  
 CCTGCATCGTCTGGCTGGCTTATCCCATCTTTTTTGGCACCTCGCAGTCGGCTGACAAGGTAACCTC  
 TGAGGCCCTGCCGTGGAATTCAGCCGCCATTGCTGGCACATAAT

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

&gt;MR210868 protein sequence

Red=Cloning site Green=Tags(s)

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MSGKGGWAWWARLPLCLLLSLYGSWVPSSLGPKGHPHMNSIRIDGDITLGGFLFPVHGRGSEGKACGEL
KKEKGIHRLEAMLFALDRINNDPDLNPNITLGARILDTCRDTHALEQSLTFVQALIEKDGTEVRCGSGG
PPIITKPERVVGVIGASGSSVSIMVANILRLFIPQISYASTAPDLSDNSRYDFFSRVVPSTYQAQAMV
DIVRALKWNYVSTLASEGSYGESGVEAFIQKSRENGGVCIAQSVKIPREPKTGEFDKIIKRLLLETSNARA
IIIFANEDDIRRVLEAARRANQTGHFFWMGSDSWGSKSAPVLRLEEVAEGAVTILPKRTSVRGFDRYFSS
RTLNNRRNIWFAEFWEDNFHCKLSRHALKKGSHIKKCTNRERIGQDSAYEQEGKVQFVIDAVYAMGHAL
HAMHRDLCPRVGLCPRMDPVDGTQLLKYIRNVNFSGIAGNPVTFNENGDAPEGRYDIYQYQRRNGSAEYK
VIGSWTDHLHLRIERMQWPGSGQLPRISLPCQPGERKKTVKGMACCWHCEPCTGYQYQVDRYTCKTC
PYDMRPTENRTSCQPIPIVKLEWDSPWAVLPLFLAVVGIATLFVVVTFVRYNDTPIVKASGRELSYVLL
AGIFLCYATTFLMIAEPDLGTCSLRRIFLGLGMSISYAALLTKTNRIYRIFEQGRSVSAPRFISPASQL
AITFVLISLQLLGICVWFVVDPSHSVVDQDQRTLDPRFARGVLKCDISDLSLICLLGYSMLLMVTCTVY
AIKTRGVPETFNEAKPIGFTMYTTCIVWLAFIPIFFGTSQSADKVTSEALPVEFSPPLLAHN
  
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001013385

**ORF Size:** 2499 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:**

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\\_001013385.2](#)

**RefSeq Size:** 3231 bp

**RefSeq ORF:** 2499 bp

**Locus ID:** 268934

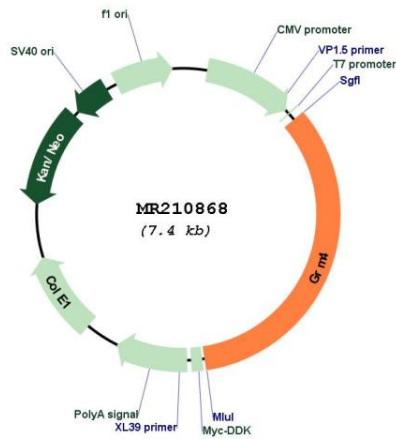
**UniProt ID:** [Q68EF4](#)

**Cytogenetics:** 17 A3.3

**MW:** 92.8 kDa

**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 inhibits adenylate cyclase activity (By similarity). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR210868