

## Product datasheet for **MG211370**

### **Grik5 (NM\_008168) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Grik5 (NM_008168) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Grik5
Synonyms:	GluK5; GluRgamma2; KA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG211370 representing NM\_008168  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCGGCTGAGCTGCTGCTGCTGATAGTCGCCTTCGCCAATCCCAGCTGCCAGGTGCTGTCATCAC  
 TGCATGCGTGCATCCTGGACGACCAGACCGTGTGGCCGTGGTGGAGCTCTGGCCCTGGCCCTGGC  
 CCGAGAGCAGATCAATGGGATCATCGAGGTCCCAGCCAAGGCCAGAGTGAAGTAGACATCTTTGAGCTG  
 CAGCGGGACAGCCAGTACGAGACCACGGACACCATGTGTGATCCTGCCAAGGGGTTGTATCTGTCT  
 TGGGACCTCCTCCAGCCAGCTTCTGCCTCCACCGTGGCCATATCTGTGGGAGAAGGAGATCCCCA  
 CATCAAGTGGTCTGAGGAGACGCCCGCTTCAGTACCTTCGCTTCGCATCTGTGAGCTGTACCCC  
 AGTAATGAAGATGTCAGCCTGGCAGTCTCCGAATCCTCAAGTCTTTAACTACCCCTCAGTAGCCTCA  
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 CCATGAACGAGTACCACAGGCGCCTCAATTGCAACCTCACCCAGATCGGGGGCCTCCTCGACCAAGGG  
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 CGAAGCCACCAGCCGCTCGGCCGCGGCCAGGCCCCACCGACCCCGAGCTGACCGAGCACGAA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >MG211370 representing NM\_008168  
 Red=Cloning site Green=Tags(s)

MPAELLLLLIVAFANPSCQVLSLRMAAILDDQTVCGRGERLALALAREQINGIIEVPAKARVEVDIFEL  
 QRDSQYETDTMCQILPKGVSVLGPSSPASASTVSHICGEKEIPHIKVGPEETPRLQYLRFAVSLYP  
 SNEDVSLAVSRILKSFNYPASLICKAKAECLLRLEELVRGFLISKETLSVRMLDDSRDPTLLKEIRD  
 VSTIIIDANASISHLVLRKASELGMTSAFYKYILTTMDFPILHLDDGIVEDSSNILGFSMFNTSHPFY  
 PEFVRSLNMSWRENCEASTYGPALSAALMFDVAVHVVSARELNRSQEIGVKPLACTSANIWPHTSLMNYL  
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 TILENPYVMRRPNFQALSGNERFEGFCVDMLRELAELRFRYRLRLVEDGLYGAPEPNGSWTGMV  
 GELINRKADLAVAFAFTITAEREKVIDFSKPFMTLGISILYRVHMGRKPGYFSFLDPFSPA  
 VWLFMLLAYLAVSCLFLAARLSPYEWYNPHCLRARPHILENQYTLGNLWFPVGGFMQQGSEIMPRALSTR  
 CVSGVWVAFTLI IISSTANLAFLTVQRMEVPVESADDLADQTNIEYGTIHAGSTMTFFQNSRYQTY  
 QRMWNMQSKQPSV FVKSTEEGIARVLSRYAFLLESTMNEYHRRNLNLTQIGLLDTKGYGIGMPLG  
 SPFRDEITLAILQLQ ENNRLEILKRKWEGRCPKEEDHRAKGLGMENIGGIFVVLICGLIIAVFVAVMEFI  
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 GPRELTEHE

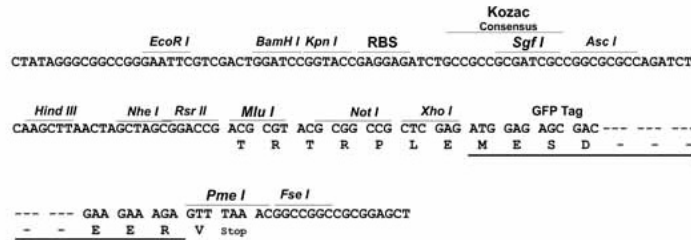
TRTRPLE - GFP Tag - V

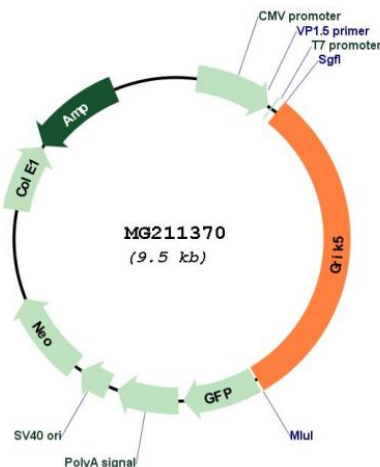
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_008168

**ORF Size:** 2937 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\\_008168.2](#), [NP\\_032194.2](#)

**RefSeq Size:** 3861 bp

**RefSeq ORF:** 2940 bp

**Locus ID:** 14809

**UniProt ID:** [Q61626](#)

**Cytogenetics:** 7 13.73 cM

**Gene Summary:** Receptor for glutamate. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. The postsynaptic actions of Glu are mediated by a variety of receptors that are named according to their selective agonists. This receptor binds kainate > quisqualate = glutamate >> AMPA.[UniProtKB/Swiss-Prot Function]