

Product datasheet for **MG223608**

Grid2 (NM_008167) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grid2 (NM_008167) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Grid2
Synonyms:	B230104L07Rik; cpr; GluD2; GluRdelta2; ho; Lc; Lc; MMS10-AC; Ms10ac; nmf408; tpr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG223608 representing NM_008167 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGTTTTCCCTTGCTCTTGTCTTCTGTCCTTCTGTTGGTCTCGAACCTGGGACCTGGCGACCGCTG
ATTCTATCATCCACATCGGAGCAATTTTTGATGAATCTGCTAAAAAGATGATGAAGTATCCGCACAGC
AGTTGGTGACCTCAACCAGAATGAGGAAATCTTACAGACTGAGAAAATCACATTTCTGTGACGTTTGT
GATGGCAACAACCTTTCAAGCTGTTCAAGAAGCATGTGAATATGAACCAGGGCATCTTGGCCTTGG
TCAGCTCCATTGGTTGCACATCAGCTGGGTCCCTCCAGTCTTTGGCAGATGCCATGCATATCCCCACCT
CTTCATTACGCGCTCAACAGCTGGGACCCCAAGAAGTGGCTGTGGCCTCACCCGGAGCAACAGAAATGAT
GACTATACTCTTTAGTTCGTCACCTGTCTACTTGAATGAAGTCATCCTAAGAGTAGTCACAGAGTATG
CATGGCAGAAATTTATTCTTCTATGACAGTGAATATGATATCCGTGGAATCCAGGAATTTTTGGACAA
AGTATCCCAGCAGGGAATGGATGTTGCCCTTCAAAGGTGAAAAACAACATCAACAAAATGATCACCACA
CTCTTTGACACCATGAGGATAGAGGAGTTGAATCGCTATCGAGACACTCTTAGAAGGCCATCCTTGTCA
TGAATCCTGCCACAGCCAAATCCTTCATAAGTGAGGTGGTGGAGACGAATCTGGTTGCTTTTGACTGTCA
CTGGATCATCATTAAATGAGGAAATAAATGATGTGGATGTTCCAGGAATGTCAGAAGTCCATTGGAAGG
TTAACAATAATTCGGCAGACATTTCCAGTCCCCAGAATAAAGTCAGCGCTGTTCCGTGGCAACCATC
GAATTTCTTCACTACTGTGTATCCGAAGGATCCCTTTGCACAGAATATGGAGATTTCTAACCTTTACAT
CTATGACACGGTCTTCTGCTTTCGAATGCCTTCCATAAGAAGCTGGAGGACCGTAAGTGGCACAGCATG
GCAAGCTTGTCTGTATCAGGAAAACTCCAAGCCTGGCAAGGAGGGCGGTCCATGCTGGAGACCATCA
AGAAGGGTGGAGTTAATGGATTGACTGGAGATCTAGAATTTGGAGAAAATGGAGGTAACCCCAATGTCCA
CTTTGAAATCCTTGAACCAACTATGGAGAAGAACTTGGCAGGGGTGTCGGTAACTTGGGTGCTGGAAT
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GAGTGGTACTGTATTGGAGGAGCCTTTGTAATGGTCTCTGAAAATGTCTTGGGAAAACCGAAGAATA
CCAGGGCTTCTCCATTGATGTTTTGGATGCCCTATCTAACTACCTGGGTTTTAATTATGAAATTTATGTT



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GCACCGGACCACAAATATGGAAGCCACAAAGAGGATGGGACATGGAATGGACTGGTAGGAGAACTTGTTT
 TTAAGAGAGCTGACATTGGGATTTACAGCTTTAACCATCACTCCAGACCGGAGAATGTTGTAGATTTTAC
 AACACGCTACATGGACTACTCAGTGGGAGTCTTCTTTCGAAGGGCAGAAAAACAGTGGATATGTTTGCC
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 CTTTCTCACTATCACCCGATTGAGAGCTCCATCCAGTCTCTTCAAGATCTGTCCAAGCAAACAGATAT
 CCCTTATGGCACAGTCTTGGACTCGGCAGTATATCAGCATGTCCGCATGAAGGGGCTGAATCCTTTTCGAG
 AGAGACAGCATGTATTCCAGATGTGGAGGATGATCAACCGAAGCAATGGGTGAGAAAAAATGTTTGG
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 ATATGTGGCTATTAACGACCCCGACTGTTCTTCTACTGTTGGGAACACTGTTGCTGACCGGGGGTAT
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 GCCTGAGCACCGAAGTGGCCCTTTAGGCACAGGGCTCCTAATGGGGCTTTTTCAGGAGTCTATCAA
 ACAATGTCATCTATTCTTATCAGCCTACTCCACTCTGGGGCTCAATCTGGGCAATGACCCCGACCGAG
 GCACGTCCATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG223608 representing NM_008167
 Red=Cloning site Green=Tags(s)

MEVFPLLLFLSFCWSRTWDLATADSIHIGAIHFDESAKKDDEVFRVAVGDLNQNNEIILQTEKITFSVTFV
 DGNPNFQAVQEACELMNQILALVSSIGCTSAGSLQSLADAMHIPHERLIQRSTAGTPRSGCGLTRSNRND
 DYTLSVRPPVYLNEVILRVVTEYAWQKFIIFYDSEYDIRGIQEFLDKVSQQGMDVALQKVENNINKMITT
 LFDTMRIEELNRYRDLRRAILVMNPATAKSFISEVVETNLVAFDCHWIIINEEINDVDVQELVRRSISR
 LTIIIRQTFPVPQNISQRCFRGNHRISSSLCDPKDPFAQNMEISNLYIYDVLVLLANAFHKKLEDRKWHSM
 ASLSCIRKNSKPWQGRSMLTIKKGVNGLTGDLEFGENGGNPNVHFEILGTNYGEELGRGVRKLGCVN
 PVTGLNGSLTDKLENNMRGVLRVVTVLEEPFVMVSENVLGPKKYQGFSDVLDALSNYLGFNIEIYV
 APDHKYGSPQEDGTWNLVGLVFKRADIGISALITPDRENVVDFTRYMDYSVGVLLRRAEKTVDMFA
 CLAPFDLSLWACIAGTVLLVGLLVYLLNWLNPPRLQMGSMSTTLYNSMWFVYGSFVQGGVEPYTTLAT
 RMMMGAWWLFALIVISSYANLAAFLITRIESSIQSLQDLQSKQTDIPYGTVLDSAVYQHVRMGLNPF
 RDSMYSQMWRMINRNSGENNVLESQAGIQKVYGNVAFVWDAAVLEYVAINDPDCSFYTVGNTVADRGY
 GIALQHGSPPYRDVFSQRILELQQSGDMDILKHKWPKNGQCDLYSSVDAKQKGGALDIKSLAGVFCILAA
 GIVLSCLIAVLETWWSRRKGSRVPSKEDDKEIDLEHLHRRVNSLCTDDSPHKQFSTSSIDLTPLDIDL
 PTRQALEQISDFRNTHITTTTIFEPIQTLRTLSAKAASGFAGFSVPEHRTGPFRRHAPNGGFFRSPK
 TMSSIPYQPTPLGLNLGNPDRGTSI

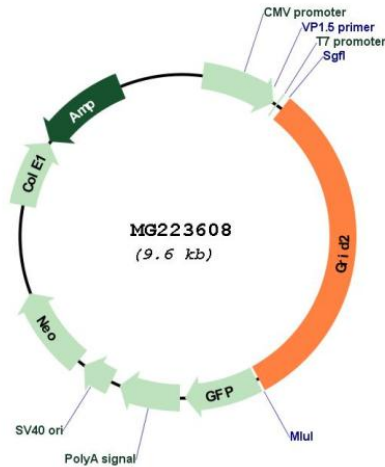
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:


Plasmid Map:

ACCN: NM_008167

ORF Size: 3021 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_008167.3
RefSeq Size:	3024 bp
RefSeq ORF:	3024 bp
Locus ID:	14804
UniProt ID:	Q61625
Cytogenetics:	6 29.77 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. Promotes synaptogenesis and mediates the D-Serine-dependent long term depression signals and AMPA receptor endocytosis of cerebellar parallel fiber-Purkinje cell (PF-PC) synapses through the beta-NRX1-CBLN1-GRID2 triad complex.[UniProtKB/Swiss-Prot Function]