

Product datasheet for **MG226369**

Cacng2 (NM_007583) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacng2 (NM_007583) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cacng2
Synonyms:	AW060990; B230105C07Rik; B930041E13Rik; stargazer; stargazin; stg; wag; waggler
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226369 representing NM_007583 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCTGTTTGATCGAGGTGTTCAAATGCTTTTAACCACCGTTGGTGCTTTCGCTGCCTTCAGCTTGA
TGACCATCGCTGTGGAAACCGACTATTGGCTGTACTCCAGAGGGGTTTGAAGACCAAAGTGTCAAGTGA
GAATGAAACCGCAAGAAGAACGAGGAAGTTATGACCCATTCCGGATTATGGAGAACCTGCTGCCTCGAA
GGGAACCTCAAAGGTCTGTGCAAGCAAATCGACCACTTCCGGAAGACCGGGACTACGAAGCTGACACCG
CAGAGTATTTCCCGGGCCGTGAGGGCCTCGAGTATCTCCCGATCCTGAGTGTGATCCTGCTTTTCAT
GGGTGGCCTCTGCATCGCGGCGAGCGAGTTCTACAAGACACGCCACAACATCATCCTGAGTGTGGCATC
TTCTTCGTGTCTGCAGGTCTTAGTAATATCATCGGGATCATCGTGTATATATCAGCCAATGCTGGAGACC
CCTCCAAGAGTGACTCCAAAAGAAGAGCTACTCCTACGGCTGGTCTTCTACTTCGGGGCCCTGTCTT
CATCATCGCCGAGATGGTCGGGGTGTGGCCGTGCACATGTTTATCGACCGCCACAAACAGCTGCGGGCC
ACGGCCCGCGCCACCGACTACCTCCAGGCCTCCGCCATCACCCGCATCCCAGCTACCGTACCGCTACC
AGCGCCGAGCCGCTCCAGCTCGCGCTCCACCGAGCCCTCACTCCAGAGACGCTCGCCCGTGGGCGT
GAAGGGCTTCAACACCTGCCGTCCACGGAGATCTCAGTGTACACCCTCAGTAGGACCCCTGAAGGCT
GCCACCACGCCACCGCCACCTACAACCTCGGACAGGGATAACAGCTTTCTCCAGTCCACAACCTGTATCC
AGAAGGACAGCAAGGACTCTCTCCACGCCAACACAGCCAACCGCCGACCACGCCCGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG226369 representing NM_007583
 Red=Cloning site Green=Tags(s)

MGLFDRGVQMLLTTVGAFAAFSLMTIAVGTDYWLYSRGVCKTKSVSENETSKKNEEVMTHSGLWRTCCLE
 GNFKGLCKQIDHFPEDADYEADTAEYFLRAVRASSIFPILSVILLFMGGLCIAASEFYKTRHNIILSAGI
 FFVSAGLSNIIGIIVYISANAGDPSKSDSKKNSYSYGWSFYFGALSFIIAEMVGLAVHMFIDRHKQLRA
 TARATDYLQASAITRIPSYRIRYQRRSRSSSRSTEPHSRSDASPVGVKGFNTLPSTEISMYTLSRDPLKA
 ATPTATYNSDRDNSFLQVHNCIQKDSKDSLHANTANRRRTPV

TRTRPLE - GFP Tag - V

Restriction Sites:

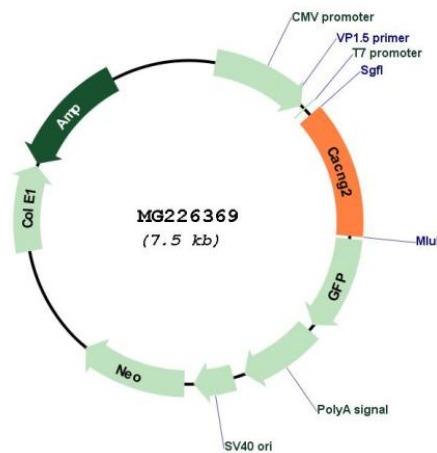
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_007583

ORF Size: 969 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_007583.2 , NP_031609.1
RefSeq Size:	2887 bp
RefSeq ORF:	972 bp
Locus ID:	12300
UniProt ID:	O88602
Cytogenetics:	15 36.92 cM
Gene Summary:	Regulates the trafficking and gating properties of AMPA-selective glutamate receptors (AMPA receptors). Promotes their targeting to the cell membrane and synapses and modulates their gating properties by slowing their rates of activation, deactivation and desensitization. Does not show subunit-specific AMPA receptor regulation and regulates all AMPAR subunits. Thought to stabilize the calcium channel in an inactivated (closed) state (By similarity). [UniProtKB/Swiss-Prot Function]