

Product datasheet for MR226369

Cacng2 (NM_007583) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacng2 (NM_007583) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacng2
Synonyms:	AW060990; B230105C07Rik; B930041E13Rik; stargazer; stargazin; stg; wag; waggler
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226369 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCTGTTTGATCGAGGTGTTCAAATGCTTTTAACCACCGTTGGTGCTTTCGCTGCCTTCAGCTTGA
TGACCATCGCTGTGGAAACCGACTATTGGCTGTACTCCAGAGGGGTTTGAAGACAAAAGTGTCAGTGA
GAATGAAACCAGCAAGAAGAACGAGGAAGTTATGACCCATTCCGGATTATGGAGAACCTGCTGCCTCGAA
GGGAACCTCAAAGGTCTGTGCAAGCAAATCGACCACTTCCGGAAGACCGGGACTACGAAGCTGACACCG
CAGAGTATTTCTCCGGCCGTGAGGGCCTCGAGTATCTCCCGATCCTGAGTGTGATCCTGCTTTTCAT
GGGTGGCCTCTGCATCGCGGCGAGCGAGTTCTACAAGACACGCCACAACATCATCCTGAGTGCTGGCATC
TTCTTCGTGTCTGCAGGTCTTAGTAATATCATCGGGATCATCGTGTATATATCAGCCAATGCTGGAGACC
CCTCCAAGAGTGACTCCAAAAGAAGACGCTACTCCTACGGCTGGTCTTCTACTTCGGGGCCCTGTCTT
CATCATCGCCGAGATGGTCGGGGTGTGGCCGTGCACATGTTTATCGACCCGACAAACAGCTGCGGGCC
ACGGCCCGCGCCACCGACTACCTCCAGGCCTCCGCCATCACCCGATCCCCAGCTACCGTACCGCTACC
AGCGCCGACCGCTCCAGCTCGCGCTCCACCGAGCCCTCACTCCAGAGACGCTCGCCCGTGGGCGT
GAAGGGCTTCAACACCTGCCGTCCACGGAGATCTCAGTACACCCTCAGTAGGACCCCTGAAGGCT
GCCACCACGCCACCGCCACCTACAACCTCGGACAGGGATAACAGCTTTCTCCAGTCCACAACCTGTATCC
AGAAGGACAGCAAGGACTCTCTCCAGCCAACACAGCCAACCGCCGACCAAGCCCGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR226369 protein sequence
 Red=Cloning site Green=Tags(s)

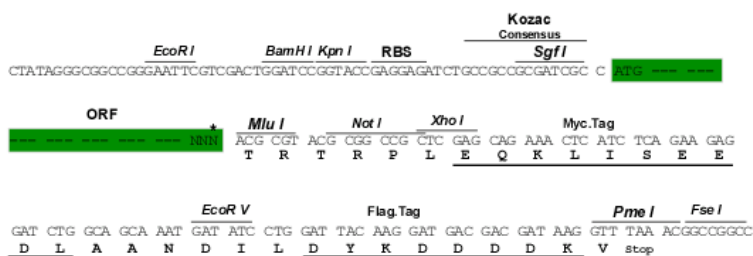
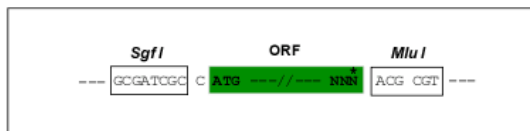
```
MGLFDRGVQMLLTTVGFAAFSLMTIAVGTDYWLYSRGVCKTKSVSENETSKKNEEVMTHSGLWRTCCLE
GNFKGLCKQIDHFPEDADYEADTAEYFLRAVRASSIFPILSVILLFMGGLCIAASEFYKTRHNIILSAGI
FFVSAGLSNIIGIIVYISANAGDPKSDSKKNSYSYGWSFYFGALSFIIAEMVGLAVHMFIDRHKQLRA
TARATDYLQASAITRIPSYRYRYQRRSRSSRSTEPSHSRDASPVGVKGFNTLPSTEISMYTLSRDPLKA
ATTPATYNSDRDNSFLQVHNCIQKDKDSLHANTANRRRTPV
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_007583

ORF Size: 972 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_007583.2](#), [NP_031609.1](#)

RefSeq Size: 2887 bp

RefSeq ORF: 972 bp

Locus ID: 12300

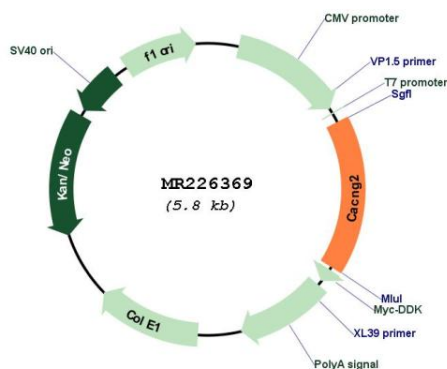
UniProt ID: [O88602](#)

Cytogenetics: 15 36.92 cM

MW: 35.9 kDa

Gene Summary: Regulates the trafficking and gating properties of AMPA-selective glutamate receptors (AMPA-Rs). 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]

Product images:



Circular map for MR226369