

## Product datasheet for RR202459

### Cacng8 (NM\_080696) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cacng8 (NM_080696) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacng8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR202459 representing NM_080696 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

CTGGAATCATTGAAACGCTGGAATGAAGAGAGGGGTTTGTGGTGCGAAAAGGGCCTTCAGGTA  
CTACTGACCCATAGGGCGCTTTGCGAGCTTTGGCCCTCATGACCATCGCCATCAGCACTGACTACTGGCTCTACAC  
AAGAGCTCTCATCTGCAACACCACCAACCTCACAGCAGGTGATGATGGACCACCCATCGTGGGGGCGAGT  
GGCTCCTCAGAGAAGAAGGACCCCTGGGGCCCTCACACATTCAGGCCTCTGGCGGATATGCTGCCTGGAAG  
GGTTGAAAAGAGGTGTCTGCGTGAAGATCAACCCTCCCGGAGGACAGGACTACGACCACGACGCGC  
GGAGTACCTGCTCCGAGTAGTCCGGGCTCCAGCATCTTTCTATCCTGAGCGCCATCCTGCTGCTGCTC  
GGGGCGGTGTGCGTAGCTGCCTCTCGCTCTACAAATCCAAAAGGAACATCATCTGGGCGCAGGGATCC  
TGTTCTGGCAGCAGGCCTGAGCAACATCATCGGGGTGATCGTGTACATATCGGCAAACGCGGGCGAGCC  
AGGCCCAAGAGGGACGAGGAGAAGAAAACCACTATTCGTATGGCTGGTCTTCTACTTCGCGGGGCTG  
TCATTATCCTGGCCGAGGTGATCGGCGTGTAGCCGTCAACATCTACATCGAGCGCAGCCGCGAGGCAC  
ACTGCAATCACGCTCGGACCTACTCAAGGCCGGCGGGCGGGCGGCGAGTGGCGGGAGCGGCCCTC  
GGCCATCCTCCGTCTGCCAGTTACCGCTCCGCTACCGCCCGCTCCCGCTCCAGCTCCCGAGGCTCC  
AGCGAGGCTCGCCATCGCGGATGCGTCTCCCGCGGCCCGGGGGCCGGGCTTCGCTCCACGGACA  
TCTCCATGTACACGCTCAGTCCGACCCGTCAGGGGACGCTGGCTGCGGGGCTGGCGAGCGCCGGGG  
TGGAGGCGGGCGGTGCCGGCTGGGTGCCTACGGCGGGGCGGGCGGGGCGAGCGGGGGCGGGGACGGG  
TCGGAGCGGGACCGAGGGAGCTCAGCGGGCTTCTCACGCTGCACAACGCCTTCCCAAGGAGCGGGCT  
CCGGCGTACGGTACGGTACCGGACCGCCGCTGCGCGGGCGCCCGCGCCCGCTCCTGCAGCGCC  
CGCGCCCGGACGCTGTCAAAGAGGCCCGCGTCCAACACCAACGCTCAACAGGAAAACACGCC  
GTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



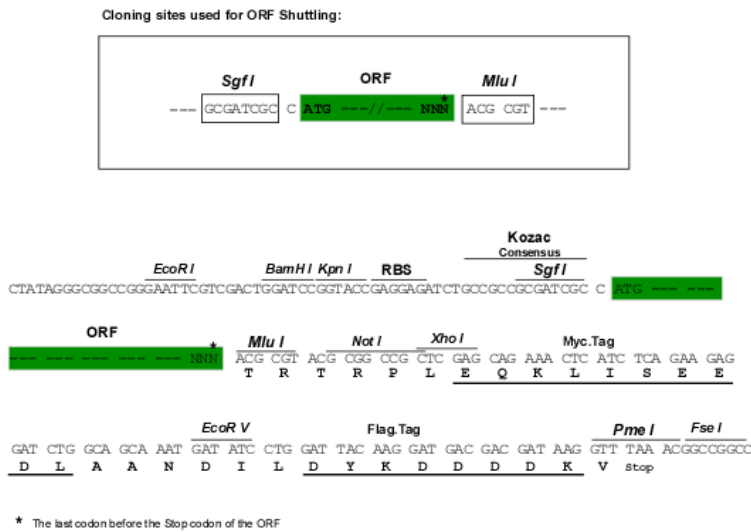
**Protein Sequence:** >RR202459 representing NM\_080696  
Red=Cloning site Green=Tags(s)

LESLKRWNEERGLWCEKGVQVLLTTIGFAAFGLMTIAISTDYWLYTRALICNTTNTLTAGDDGPPHRGGS  
 GSSEKKDPGGLTHSGLWRICCLEGLKRGVCVKINHFPEDTDYDHDSA EYLLRVVRASSIFPILSAILLLL  
 GGVCVAASRVYKSKRNIILGAGILFVAAGLSNIIGVIVYISANAGEPGPKRDEEKNHYSYGWSFYFGGL  
 SFILAEVIGVLAVNIYIERSREAHQCQSRDLLKAGGGAGGSGGSPSAILRLPSYRFRYRRRSRSSRGS  
 SEASPSRDASPGPGPGPFASDTISMYTLSRDPKSGSVAAGLASAGGGGGGAGVGAYGGAAGAAGGGGTG  
 SERDRGSSAGFLTLHNAFPKEAASGVTVTVTGPPAAPAPAPPAPAPGTL SKEAASNTNTLNRKTTT  
 V

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_080696

**ORF Size:** 1263 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\\_080696.2](#), [NP\\_542427.1](#)

**RefSeq Size:** 1266 bp

**RefSeq ORF:** 1266 bp

**Locus ID:** 140729

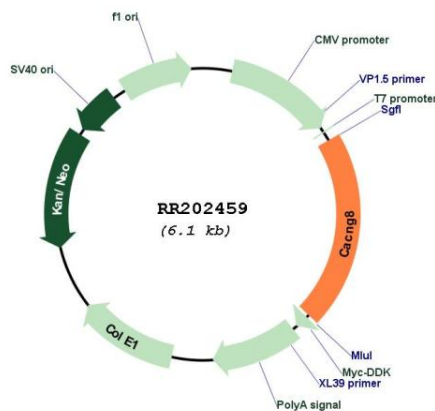
**UniProt ID:** [Q8VHW5](#)

**Cytogenetics:** 1q12

**MW:** 43.3 kDa

**Gene Summary:** Voltage-dependent calcium channels couple membrane depolarization in a number of cellular processes. These activities are regulated by distinct channels composed of the pore-forming alpha-1 subunit and the modulatory beta, alpha-2/delta and gamma subunits. The protein encoded by this gene represents one of the gamma subunits. It is an integral membrane protein that is thought to stabilize the calcium channel in an inactive (closed) state. This gene is located in a cluster with two similar gamma subunit-encoding genes on chromosome 1. The mRNA for this gene is believed to initiate translation from a non-AUG (CUG) start codon. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RR202459