

## Product datasheet for **RG204695**

### CASQ2 (NM\_001232) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CASQ2 (NM_001232) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CASQ2
Synonyms:	PDIB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204695 representing NM_001232 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGAGAACTCACTTGTTTATTGTGGGATTTATTTCTGTCCTCTTGCAGGGCAGAAGAGGGGCTTA  
ATTTCCCCACATATGATGGGAAGGACCGAGTGGTAAGTCTTTCCGAGAAGAACTCAAGCAGTTTTAA  
GAAATATGACTTGCTTTGCCTCTACTACCATGAGCCGGTGTCTTCAGATAAGGTCACGCAAAAACAGTTC  
CAACTGAAAGAAATCGTGCTTGAGCTTGTGCCAGGTCCTTGAACATAAAGCTATAGGCTTTGTGATGG  
TGGATGCCAAGAAAGAAGCCAAGCTTGCCAAGAACTGGGTTTTGATGAAGAAGGAAGCCTGTATATTCT  
TAAGGGTGATCGACAATAGAGTTTGATGGCGAGTTGACAGTGTGCTTGGTGGAGTTCTCTGGAT  
CTAATTGAAGACCCAGTGAGATCATCAGCAGCAAAGTGAAGTCCAAGCCTTCGAACGCATTGAAGACT  
ACATCAAACCTATTGGCTTTTTCAAGAGTGAGGACTCAGAATACTACAAGGCTTTTGAAGAAGCAGCTGA  
ACACTTCCAGCCTTACATCAAAATCTTTGCCACCTTTGACAAAGGGGTTGCAAAGAAATATCTTTGAAG  
ATGAATGAGGTTGACTTCTATGAGCCATTTATGGATGAGCCATTGCCATCCCAACAAACCTTACACAG  
AAGAGGAGCTGGTGGAGTTTGTGAAGGAACACCAAGACCCACTCTACGTCGCCTGCGCCAGAAGAAAT  
GTTTGAACATGGGAAGATGATTTGAATGGGATCCACATTTGTGGCCTTTGCAGAGAAGAGTGATCCAGAT  
GGCTACGAATTCCTGGAGATCCTGAAACAGGTTGCCCGGACAATACTGACAACCCGATCTGAGCATCC  
TGTGGATCGACCCGACGACTTTCCTCTGCTCGTTGCCTACTGGGAGAAGACTTTCAAGATTGACCTATT  
CAGGCCACAGATTGGGTGGTGAATGTCACAGATGCTGACAGTGTCTGGATGGAGATTCCAGATGATGAC  
GATCTTCCAAGTCTGAGGAGCTGGAGGACTGGATTGAGGATGTGCTTTCTGAAAGATAAACACTGAAG  
ATGATGATGAAGATGATGATGATGATAATTCTGATGAAGAGGATAATGATGACAGTGTGATGATGA  
TGATGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG204695 representing NM\_001232  
 Red=Cloning site Green=Tags(s)

MKRTHLFIVGIYFLSSCRAEEGLNFPTYDGKDRVVSLSEKNFKQVLKKYDLLCLYHEPVSSDKVTQKQF  
 QLKEIVLELVAQVLEHKAIGFVMVDAKKEAKLAKKLGFDDEEGLYILKGDRTIEFDGEFAADVLEFLLD  
 LIEDPVEIISSKLEVQAFERIEDYIKLIGFFKSEDESEYKAFEEAAEHFQPYIKFFATFDKGVAKKLSLK  
 MNEVDFYEPFMDEPIAIPNKPYTEEELVEFVKEHQRPRTLRRRLRPEEMFETWEDDLNGIHIIVAFAEKSDPD  
 GYEFLEILKQVARDNTDNPDLNILWIDPDDFPLLVAWYWEKTFKIDLFRPQIGVVNVTADASYWMEIPDD  
 DLPTAEELDWIEDVLSGKINTEDDDDDDDDNSDEEDNDDSDDDDE

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001232

**ORF Size:** 1197 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\\_001232.2](#), [NP\\_001223.2](#)

**RefSeq Size:** 2682 bp

**RefSeq ORF:** 1200 bp

**Locus ID:** 845

**UniProt ID:** [O14958](#)

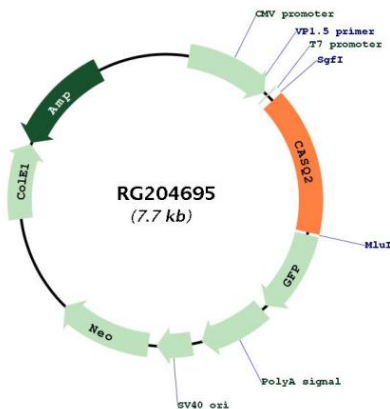
**Cytogenetics:** 1p13.1

**Domains:** Calsequestrin

**Protein Families:** Druggable Genome

**Gene Summary:** The protein encoded by this gene specifies the cardiac muscle family member of the calsequestrin family. Calsequestrin is localized to the sarcoplasmic reticulum in cardiac and slow skeletal muscle cells. The protein is a calcium binding protein that stores calcium for muscle function. Mutations in this gene cause stress-induced polymorphic ventricular tachycardia, also referred to as catecholaminergic polymorphic ventricular tachycardia 2 (CPVT2), a disease characterized by bidirectional ventricular tachycardia that may lead to cardiac arrest. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG204695