

Product datasheet for **RC239818**

CTNNA2 (NM_001282597) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CTNNA2 (NM_001282597) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CTNNA2
Synonyms:	CAP-R; CAPR; CDCBM9; CT114; CTNR
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC239818 representing NM_001282597
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTTCGGCAACTTCACCTATCATTCTGAAATGGGACCCAAAAGTTTGGAAATCCGGACGCTAACAG
 TGGAAAGGCTGTTGGAGCCACTTGTACACAGGTGACTACACTTGTCAACACAAGCAACAAAGGCCCATC
 TGGTAAAAAGAAAGGGAGGTCAAAGAAAGCCCATGTAAGTACTAGTGCCTCTGTAGAGCAAGCCACTCAGAAT
 TTCCTGAAAAAGGGTGAACAGATCGCTAAGGAGAGTCAAGATCTCAAAGAAGAGTTGGTGGCTGCTGTAG
 AGGATGTGCGCAAACAAGGTGAGACGATGCGGATGCGCTCCTCCGAGTTTGCAGATGACCCTTGCTCGTC
 GGTAAAGCGCGCCACCATGGTACGGGCGCAAGGGCTTTGCTCTCCGCGGTGACACGCTTACTCATCCTG
 GCGGACATGGCAGATGTCATGAGACTTTTATCCCATCTGAAAATTGTGGAAGAGGCCCTGGAAGCTGTCA
 AAAATGCTACAAATGAGCAAGACCTTGCAAACCGTTTTAAAGAGTTTGGGAAAGAGATGGTAAAACCTAA
 CTATGTAGCAGCAAGAAGACAACAGGAGCTGAAGGATCCTCACTGTCGGGATGAGATGGCAGCCGCCGA
 GGGGCTCTGAAGAAGAATGCCACAATGCTGTACACGGCCTCTCAAGCATTCTCCGCCACCCAGATGTCCG
 CCGCTACGAGAGCCAACCGAGATTATGTGTTCAAACAAGTCCAGGAGGCCATCGCCGGCATCTCCAATGC
 TGCTCAAGCTACCTCGCCCACTGACGAAGCCAAGGGCCACACGGGCATCGGCGAGCTGGCTGCGGCTCTT
 AATGAGTTTGACAATAAGATTATCTGGACCCCATGACGTTTACGCGAGGCCAGGTTCCGGCCGCTCCCTGG
 AGGAGAGGCTGGAGAGCATCATCAGCGGCGCAGCGCTGATGGCCGACTCCTCCTGCACGCGAGACGACCG
 GCGCGAGAGGATCGTGGCGGAGTGAACGCCGTGCGGCAGGCGCTCCAGGACCTGCTCAGCGAGTACATG
 AATAACTGGAAGGAAAGAAAAAGGAGATCCTCTCAACATTGCGATTGATAAGATGACTAAGAAAAACA
 GAGATCTAAGGAGACAGCTTCGAAAGCAGTGTGGATCACATATCTGACTCTTTCTGGAACCAATGT
 TCCTTTGCTAGTTCTCATTGAGGCTGCAAAGAGCGGAAATGAAAAGGAAGTGAAGAATATGCCCAAGTT
 TTCGTGAGCATGCCAACAACTGGTAGAGTTGCCAATTTGGCCTGTTCCATCTCCAACAATGAAGAAG
 GGGTGAATTAGTTCCGATGGCAGCCACCCAGATTGACAGCCTGTGTCCCAGGTCATCAATGCCGCTCT
 GACACTGGCTGCCCGCCACAGAGCAAAGTTGCTCAGGATAACATGGACGCTTTCAAAGACCAGTGGGAG
 AAGCAGGTCAGTGTGACAGAGGCCGTGGATGACATCACCTCAGTGGATGACTTCTCTGTCTCAG
 AAAATCACATCTGGAGGATGTGAACAAGTGTGTGATAGCCCTCAAGAGGGCGATGTGGACACTCTGGA
 CCGGACTGCAGGGGCCATCAGGGGCCGGCAGCTCGAGTCATACATCATCAATGCTGAGATGGAGAAC
 TATGAAGCTGGGTTTACTGAGAAGGTGTTGGAAGCTACAAAATTGCTTTCTGAAACAGTGTGCCAC
 GCTTCGCTGAACAAGTAGAGTTGCCATTGAAGCCCTGAGTGCCAACGTTCTCAACCGTTTGAGGAGAA
 TGAGTTTATCGATGCCTCTCGCCTGGTGTATGATGGCGTTCGGGACATCAGAAAGGCTGTGCTGATGATC
 AGGACCCAGAAAGAACTAGAGGATGATTCTGACTTTGAGCAGGAAGATTATGATGTGCGTAGCAGGACAA
 GTGTTCCAGACTGAGGATGACCAGCTATTGAGGGCAGAGCGCACGGGCCATCATGGCGCAACTACCGCA
 GGAGGAGAAGGCAAAAATAGCTGAGCAGGTGGAGATATCCATCAAGAGAAAAGCAAGCTGGATGCAGAA
 GTGGCCAAATGGGACGACAGCGGCAATGATATCATTGACTGGCCAAGCAGATGTGTATGATCATGATGG
 AAATGACAGACTTCACAAGAGGCAAAGGCCATTGAAAAATACATCTGATGTCTTAATGCTGCCAAGAA
 AATTGCCGAAGCAGGTTCTCGAATGGACAAATAGCTCGTGTGGCTGATCAGTGTCTGATTACAGCA
 TGTAAAGCAGGATTTATTAGCCTACCTTCAACGAATTGCCTTGATTGCCATCAGCTTAATATCTGCAGCA
 AGGTGAAGGCAGAAGTGCAGAATCTGGGAGGAGAGCTCATTGTGTGAGGACAGGAGTTCAGAGCACTTT
 CACTACCTTTTATGAGGTAGATTGTGATGTCATAGATGGGGCAGGGCTAGTCAACTTTCTACCCACCTC
 CCAACCTGTGCTGAGGGAGCTCCGATCGGGAGTGAAGCAGTATTCTCCATGCTGGACAGTGCCACAT
 CGCTTATCCAGGCAGCTAAAACTGATGAATGCTGTTGCTCAGGTGAAAGCATCCTATGTGGCCTC
 AACCAATACCAGAAGTCTATGGGACAGCAGCTGTCAACTCACCTGTTGTGCTTGAAGATGAAGGCT
 CCAGAGAAGAAGCCCTTGTGAAGAGAGAAAAGCCTGAAGAATCCAGACAGGATTCGACGAGGTTCTC
 AGAAGAAACACATTTCCGCTGTACAGGCTTAAGTGAATTCAAAGCAATGGATTCCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239818 representing NM_001282597
 Red=Cloning site Green=Tags(s)

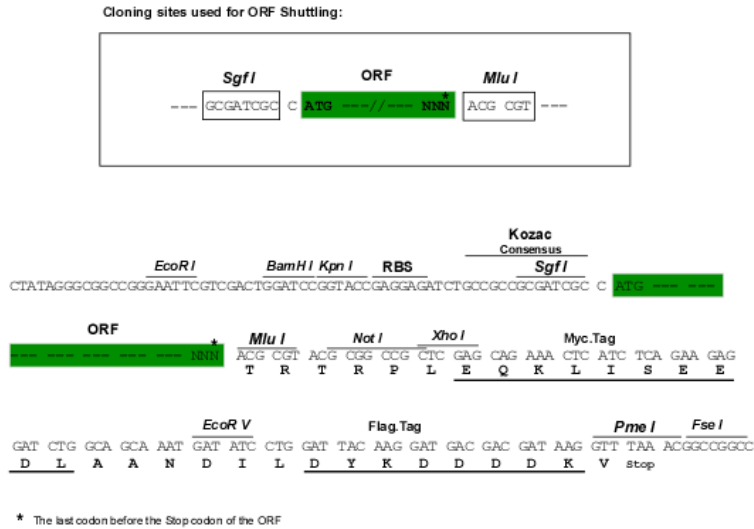
MTSATSPIILKWDPKSLEIRTLTVERLLEPLVTQVTTLVNTSNKGPSGKKKGRSKKAHVLAASVEQATQN
 FLEKGEQIAKESQDLKEELVAAVEDVRKQGETMRIASSEFADDPSSVVRGTMVRAARALLSAVTRLLIL
 ADMADVMRLLSHLKIVEEALAVKNATNEQDLANRFKEFGKEMVKLNVAARRQQELKDPHCRDEMAAAR
 GALKKNATMLYASQAFLRHPDVAATRANRDYVFKQVQEAIAIGISNAAQATSPTDEAKGHTGIGELAAAL
 NEFDNKIILDPMTFSEARFRPSLEERLESII SGAALMADSSCTRDRRERIVAECNAVRQALQDLLSEYM
 NNTGRKEKGDPLNIAIDKMTKKTRDLRRQLRKAVMDHISDSFLETNVPLLVLEAAKSGNEKEVKEYAQV
 FREHANKLVEVANLACISNNEEGVKLVRMAATQIDSLCPQVINAALTLAARPQSKVAQDNMDVFKDQWE
 KQVRVLTEAVDDITSVDDFLSVSENHILEDVNKCVIALQEGDVTDLDRTAGAIRGRAARVIHIINAEMEN
 YEAGVYTEKVLKLLSETVMPRFAEQVEVAIEAL SANVPQPFEENEIDASRLVYDGVRDIRKAVLMI
 RTPEELEDSDFEQEDYDVRSTSVQTEDDQLIAGQSARAIMAQLPQEEKAKIAEQVEIFHQEKSLDAE
 VAKWDDSGNDIIVLAKQKCMIMMEMTDFTRGKGPLKNTSDVINAAKKIAEAGSRMDKLARAVADQCPDSA
 CKQDLLAYLQRIALYCHQLNICKVKAEVQNLGGELIVSGTGVQSTFTTFFYVDCVIDGGRASQLSTHL
 PTCAEGAPIGSGSSDSSMLDSATSLIQAANKLMNAVVLTVKASYASTKYQKVYGTAAVNSPVVSWKMKMA
 PEKKPLVKREKPEEFQTRVRRGSQKKHISPVQALSEFKAMDSF

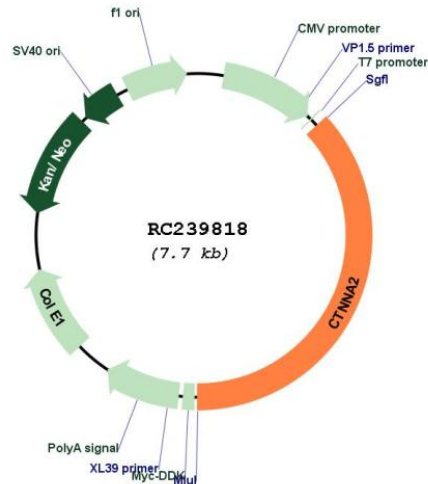
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001282597

ORF Size: 2859 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_001282597.3](#)

RefSeq Size: 4149 bp

RefSeq ORF: 2862 bp

Locus ID: 1496

UniProt ID: [P26232](#)

Cytogenetics: 2p12

Protein Families:	Druggable Genome
Protein Pathways:	Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Endometrial cancer, Leukocyte transendothelial migration, Pathways in cancer, Tight junction
MW:	105.8 kDa
Gene Summary:	May function as a linker between cadherin adhesion receptors and the cytoskeleton to regulate cell-cell adhesion and differentiation in the nervous system (By similarity). Required for proper regulation of cortical neuronal migration and neurite growth (PubMed:30013181). It acts as negative regulator of Arp2/3 complex activity and Arp2/3-mediated actin polymerization (PubMed:30013181). It thereby suppresses excessive actin branching which would impair neurite growth and stability (PubMed:30013181). Regulates morphological plasticity of synapses and cerebellar and hippocampal lamination during development. Functions in the control of startle modulation (By similarity).[UniProtKB/Swiss-Prot Function]