

Product datasheet for **RC238786**

CTNNA2 (NM_001282600) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CTNNA2 (NM_001282600) 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



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ORF Nucleotide Sequence:

>RC238786 representing NM_001282600
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTAAGAAAACAAGAGATCTAAGGAGACAGCTTCGGAAAGCAGTGATGGATCACATATCTGACTCTT
 TCCTGGAAACCAATGTTCTTTGCTAGTTCTCATTGAGGCTGCAAAGAGCGGAAATGAAAAGGAAGTGAA
 AGAATATGCCCAAGTTTTCCGTGAGCATGCCAACAACTGGTAGAGTTGCCAATTTGCCCTGTTCCATC
 TCCAACAATGAAGAAGGGGTGAAATTAGTTCGGATGGCAGCCACCCAGATTGACAGCCTGTGTCCCCAGG
 TCATCAATGCCGCTCTGACACTGGCTGCCCGGCCACAGAGCAAAGTTGCTCAGGATAACATGGACGTCTT
 CAAAGACCAGTGGGAGAAGCAGGTCCGAGTGTGACAGAGGCCGTGGATGACATCACCTCAGTGGATGAC
 TTCCTCTCTGTCTCAGAAAATCACATCTTGAGGATGTGAACAAGTGTGTGATAGCCCTCAAGAGGGCG
 ATGTGGACTCTGGACCGACTGCAGGGGCCATCAGGGGCCGGGAGCTCGAGTCATACATCATCAA
 TGCTGAGATGGAGAACTATGAAGCTGGGTTTATACTGAGAAGGTGTTGGAAGCTACAAAATTGCTTCT
 GAAACAGTGATGCCACGCTTCGCTGAACAAGTAGAGTTGCCATTGAAGCCCTGAGTGCCAACGTTCCCTC
 AACCGTTTGAGGAGAATGAGTTCATCGATGCCTCTCGCCTGGTGTATGATGGCGTTCGGGACATCAGAAA
 GGCTGTGCTGATGATCAGGACCCAGAAGAACTAGAGGATGATTCTGACTTTGAGCAGGAAGATTATGAT
 GTGCGTAGCAGGACAAGTGTTCAGACTGAGGATGACCAGCTCATTGCAGGGCAGAGCGCACGGGCCATCA
 TGGCGCAACTACCGCAGGAGGAGAAGGCCAAAAATAGCTGAGCAGGTGGAGATATCCATCAAGAGAAAAG
 CAAGCTGGATGCAGAAGTGGCCAAATGGGACGACAGCGGCAATGATATCATTGTACTGGCCAAGCAGATG
 TGTATGATCATGATGAAAATGACAGACTTCACAAGAGGCAAAGGCCATTGAAAAATACATCTGATGTCA
 TTAATGCTGCCAAGAAAATTGCCGAAGCAGGTTCTCGAATGGACAAATTAGCTCGTGTGGCTGATCA
 GTGTCCTGATTCAGCATGTAAGCAGGATTTATTAGCCTACCTTCAACGAATTGCCTGTATTGCCATCAG
 CTTAATATCTGCAGCAAGGTGAAGGCAGAAGTGCAGAATCTGGGAGGAGAGCTCATTGTGTGAGGCTGG
 ACAGTGCCACATCGCTTATCCAGGCAGTAAAAACCTGATGAATGCTGTTGCTCCTCACGGTAAAAGCATC
 CTATGTGGCCTCAACCAATACCAGAAGGTCTATGGGACAGCAGCTGTCAACTCACCTGTTGTGTCTTGG
 AAGATGAAGGCTCCAGAGAAGAAGCCCTTGTGAAGAGAGAAAAGCCTGAAGAATCCAGACACGAGTTC
 GACGAGTTCTCAGAAGAAACACATTTGCCTGTACAGGCTTTAAGTGAATCAAAGCAATGGATTCCCT
 C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238786 representing NM_001282600
 Red=Cloning site Green=Tags(s)

MTKKTRDLRRQLRKAVMDHISDSFLETNPVLLVLEAAKSGNEKEVKEYAQVFRHANKLVEVANLACSI
 SNNEEGVKLVMAATQIDSLCPQVINAALTLAARPOQSKVAQDNMDVFKDQWEKQVRVLEAVDDITSVDD
 FLSVSENHILEDVNCVIALQEGDVDTLDRTAGAIRGRAARVIHIINAEMENYEAGVYTEKVLKLLS
 ETVMRFAEQVEVAIEALSANVPQPFEEDEFIDASRLVYDGVDRIRKAVLMIRTPPELEDDSDFEQEDYD
 VRSRTSVQTEDDQLIAGQSARAIMAQLPQEEKAKIAEQVEIFHQEKSKLDAEVAKWDDSGNDIIVLAKQM
 CMIMMEMTDFTRGKGPLKNTSDVINAAKIAEAGSRMDKLARAVADQCPDSACKQDLLAYLQRIALYCHQ
 LNICSVKAEVQNLGGELIVSGLDSATSLIQAAKNLMNAVVLTVKASYVASTKYQKVYGTAAVNSPVVSW
 KMKAPEKKPLVKREKPEEFQTRVRRGSQKKHISPVQALSEFKAMDSF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

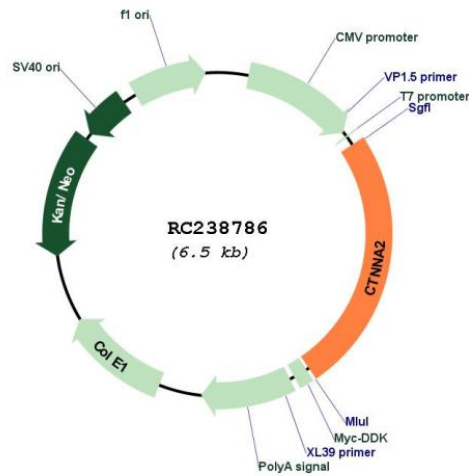
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001282600
ORF Size:	1611 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_001282600.1 , NP_001269529.1
RefSeq Size:	2889 bp
RefSeq ORF:	1614 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:	60.3 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]