

Product datasheet for **MR218524**

Ctnna2 (NM_009819) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ctnna2 (NM_009819) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ctnna2
Synonyms:	AI481747; Catna; Catna2; cdf; chp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR218524 representing NM_009819
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTTCGGCAACTTCACCTATTATTTTAAAATGGGATCCCAAAGTTTGGAAATCCGGACACTCACAG
 TGGAAAGACTATTGGAGCCACTTGTGACACAGGTGACAACACTTGTCAACACAAGCAACAAAGGTCGGTC
 TGGTAAAAAGAAAGGGAGGTCAAAGAAAGCCCATGTGCTGGCAGCATCTGTAGAACAAGCTACTCAGAAC
 TTCCTGAAAAAGGGTGAACAGATCGCTAAGGAGAGCCAAGACCTCAAAGAAGAGTTAGTGCTGTGTAG
 AGGATGTGCGGAAGCAAGGTGAGACAAATGCGGATTGCCTCCTCAGAGTTTGCAGATGACCCTTGCTCTTC
 TGTCAAGCGTGGCACCATGGTGCCTGCAGCAGGGCTCTGCTATCGGCTGTGACACGCTTGTCTATCCTG
 GCCGACATGGCAGATGTCATGAGGCTTTTATCGCATCTGAAAATTGTCGAGGAGGCTTGGAAAGCAGTCA
 AAAATGCCACAAATGAACAAGACCTTGCAAACCGATTTAAAGAGTTTGGGAAAGAGATGGTAAAAGTAA
 CTATGTAGCAGCAAGACGGCAGCAGGAGCTCAAGGACCTCACTGTAGGGATGAGATGGTGCAGCCCGT
 GGAGCCCTGAAGAAGAATGCCACCATGCTGTACACAGCCTCCCAAGCCTTCTCCGGCATCCAGATGTTG
 CTGCTACAAGAGCCAACCGAGATTATGTATTTAAACAAGTCCAAGAGGCCATAGCTGGCATCTCCAGTGC
 TGCTCAGGCCACCTCCCCACCGATGAAGCCAAAGGCCACACAGGCATCGGCGAGCTGGCTGCAGCCCTG
 AATGAGTTTGATAATAAGATCATCTGGACCCCATGACATTACAGCGAGGCCAGGTTCCGACCATCCCTGG
 AGGAGAGACTGGAGAGCATCATCAGTGGGGCTGCTCTCATGGCAGATTCTCTGCACACGTGATGACCG
 CCGTGAGCGTATTGTGGCCGAGTGAATGCAGTTCGACAGGCACTCCAGGACCTGCTAAGCGAGTACATG
 AATAACACTGGAAGGAAAGAGAAAGGAGACCCTCTCAACATTGCGATTGACAAGATGACCAAGAAAACAA
 GAGATCTGAGGAGACAGCTTCGAAAGCTGTGATGGATCACATCTCAGATTCTTTCTTGGAAACCAATGT
 CCCCTTGCTGGTTCTCATTGAGGCTGCGAAGAGCGGGAATGAGAAGGAGGTGAAGGAATACGCCCAAGTT
 TTCCTGAAACATGCCAACAAGCTGGTGGAGTTGCCAATTTGGCTTGTTCATCTCCAACATGAGGAAG
 GGGTGAATAGTCAGAAATGGCAGCCACCAGATTGACAGCCTGTGTCCCAAGTCATTAATGCTGCCCT
 CACACTGGCTGCTCGGCCACAGAGTAAAGTTGCTCAGGACAACATGGATGTCTTCAAAGACCAGTGGGAA
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 AAAACCATATCTGGAGGATGTGAACAATGTGTGATTGCCCTGCAAGAGGGAGATGTGGACACACTGGA
 TCGCACAGCTGGGGCCATACGGGGCCGGCAGCCCGGTCATTACATCATCAATGCAGAGATGGAGAAC
 TATGAAGCTGGGGTCTATACAGAGAAAGTCTGGAAGCCACAAAATTGCTTTCAGAAACAGTGTGCCAC
 GCTTTGCTGAACAAGTTGAGGTGCCATCGAAGCCCTGAGCGCCAATGTCCCTCAGCCATTGAGGAGAA
 CGATTTCATCGATGCCTCGGCCTGGTGTATGACGGTGTTCGGGACATCAGAAAGGCTGTGCTGATGATC
 AGGACTCCAGAAGAGCTAGAAGATGATTCCGACTTTGAGCAAGAGGATTATGATGTGCGGAGTGGGACAA
 GTGTTCCAGACAGAGGACGACCAGCTCATTGCTGGACAGAGTGCACGGGCCATCATGGCGCAACTACCACA
 GGAGGAGAAAGCAAAAATAGCTGAACAGGTGGAGATTTCCACCAAGAAAAAGCAAGCTGGATGCTGAA
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 GATTGCAAGCAGGCTCTCGAATGGACAAATAGCGCGCGCTGTGGCTGATCAGTGTCTTCTGATTACGCA
 TGTAAAGCAGGATTTATTAGCCTACCTTCAGCGGATTGCTTTGACTGCCATCAGCTTAACATCTGCAGCA
 AAGTGAAGGCCGAGGTTCAAGACCTAGGAGGAGAGCTCATTGTGTGAGGACAGGAGTTCAGAGCACTTT
 CACTACCTTTTATGAGGTAGATTGTGATGTCATAGATGGGGGACGGGCTAGTCAACTTTCTACCCACCTC
 CCAACCTGTGCTGAGGGAGCTCCAATCGGGAGTGGAAAGCAGTACTCCTCCATGCTGGACAGTGTACAT
 CACTCATCCAGGCAGCCAAAACCTGATGAATGCTGTTGCTCAGGTGAAAGCGTCTTATGTAGCCTC
 AACTAAATACCAGAAGTCTATGGAACAGCAGCTGTCAACTCTCCAGTTGTCTTGGAAAGATGAAGGCT
 CCTGAAAAGAAGCCCTTGTGAAGAGAGAAAAGCCTGAAGAATCCAGACAAGAGTTAGACGGGGTCTC
 AAAAGAAACACATTTACCTGTGACGGCTTAAGTGAATCAAGGCAATGGATTCCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218524 representing NM_009819
 Red=Cloning site Green=Tags(s)

MTSATSPIILKWDPKSLEIRTLTVERLLEPLVTQVTTLVNTSNKGPSGKKKGRSCKAHVLAASVEQATQN
 FLEKGEQIAKESQDLKEELVAAVEDVRKQGETMRIASSEFADDCSSVVRGTMVRAARALLSAVTRLLIL
 ADMADVMRLLSHLKIVEEALAVKNATNEQDLANRFKEFGKEMVKLNVAARRQQLKDPHCRDEMAAAR
 GALKKNATMLYASQAFLRHPDVAATRANRDYVFKQVQEAIAIGISSAAQATSPTDEAKGHTGIGELAAAL
 NEFDNKIILDPMTFSEARFRPSLEERLESII SGAALMADSSCTRDRRERIVAECNAVRQALQDLLSEYM
 NNTGRKEKGDPLNIAIDKMTKKTRDLRRQLRKAVMDHISDSFLETNVPLLVLEAAKSGNEKEVKEYAQV
 FREHANKLVEVANLACSI SNNEEGVKLVRMAATQIDSLCPQVINAALTLAARPQSKVAQDNMDVFKDQWE
 KQVRVLTEAVDDITSVDDFLSVSENHILEDVNCVIALQEGDVTDLDRTAGAIRGRAARVIHIINAEMEN
 YEAGVYTEKVL EATKLLSETVMPRFAEQVEVAIEAL SANVPQPFEENEVIDASRLVYDGVRDIRKAVLMI
 RTPEELEDSDFEQEDYDVRSTSVQTEDDQLIAGQSARAIMAQLPQEEKAKIAEQVEIFHQEKSKLDAE
 VAKWDDSGNDIIVLAKQKCMIMMEMTDFTRGKGPLKNTSDVINAAKKIAEAGSRMDKLARAVADQCPDSA
 CKQDLLAYLQRIALYCHQLNICKVKAEVQNLGGELIVSGTGVQSTFTTFYEVDCVIDGGRASQLSTHL
 PTCAEGAPIGSGSSDSSMLDSATSLIQAANKLMNAVVLTVKASYASTKYQKVYGTAAVNSPVVSWKMKMA
 PEKKPLVKREKPEEFQTRVRRGSQKKHISPVQALSEFKAMDSF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9047_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



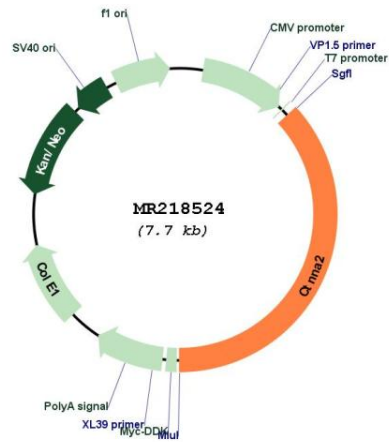
* The last codon before the Stop codon of the ORF

ACCN: NM_009819

ORF Size: 2859 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_009819.2 , NP_033949.2
RefSeq Size:	4046 bp
RefSeq ORF:	2862 bp
Locus ID:	12386
UniProt ID:	Q61301
Cytogenetics:	6 33.54 cM
MW:	105.7 kDa
Gene Summary:	<p>May function as a linker between cadherin adhesion receptors and the cytoskeleton to regulate cell-cell adhesion and differentiation in the nervous system (PubMed:12123610, PubMed:15034585). Required for proper regulation of cortical neuronal migration and neurite growth. It acts as negative regulator of Arp2/3 complex activity and Arp2/3-mediated actin polymerization. It thereby suppresses excessive actin branching which would impair neurite growth and stability (By similarity). Regulates morphological plasticity of synapses and cerebellar and hippocampal lamination during development. Functions in the control of startle modulation (PubMed:12089526).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR218524