

## Product datasheet for RC217652

### CARD10 (NM\_014550) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: CARD10 (NM\_014550) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: CARD10  
 Synonyms: BIMP1; CARMA3  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC217652 representing NM\_014550  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
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ATGCCGGGCCGGGCGGAGGCCGGGGAGGCCGAGGAGGAGGCCGGGGCCGGCTCGGGGTCTGAGGCGGAGG  
 AGGACGCGCTGTGGGAGCGAATCGAGGGCGTCCGGCATCGGCTGGCTCGCGCCCTGAACCCGGCCAAAGCT  
 CACGCCGTATCTGCGCCAGTGCCGGTTCATCGACGAGCAGGACGAGGAGGAGGTGCTGAGCACCTACCGC  
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 TTCCCTGTGCTCAACCTCAGCAGCACTGGAGCTGAGCGAGTCCCCTCCCCTCTGGGAGGCCAGAA



GCAACTGGGAGGCAGCTGTCATGGGGGACCTGAGCCTCACAACCTCGGAGGAAGCCACAGACAGTGA  
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 GGAAGACCCCGCACCCCTAAGAGATCCTTCAGCAGCATGTCAGACATCACAGGGAGTGTGACACTTAAG  
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 GGGCTGCCCTGCTCTGGGTGCAGGTGCCGCCCATGAGTGGGGACACGCAGAGGAGCTGGCCAAGTGG  
 TGCCGGCCGCATCCTGCAGGAGCAGGCCCGCCTCGTGTGGTGGAGTCCGGCAGCAGCAGAGGCTGCC  
 CAGCAGCAGTGAAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC217652 representing NM\_014550  
 Red=Cloning site Green=Tags(s)

MPGRAEAGEAEEEAGAGSGSEAEEDALWERIEGVRHRLARALNPAKLTPYLRQCRVIDEQDEEEVLSTYR  
 FPCRNVNRTGRLMDILRCRGRGYEAFLEALEFYYPEHFTLLTGQEPARQCSMILDEEGPEGLTQFLMTEV  
 RRLREARKSQLQREQLQARGVLEERAGLEQRLRDQQQAQERCQRLREDWEAGSLELLRLKDENYMIA  
 MRLAQLSEEKNSAVLRSRDLQLAVDQLKLVSRLEEECALLRRARGPPPGAEKEKEKEKEKEPDNDLV  
 SELRAENQRLTASLRELQEQEASRPAGPSERILLDILEHDWREAQDSRQELCQKLHAVQGELQWAE  
 ELRDQYLQEMEDLRLKHRTLQKDCDLKHRMATVLAQLEEIEKERDQAIQSRDRIQLQYSQSLIEKDQYR  
 KQVRGLEAERDELLTTLTSLGKALLEVQLQRAQGGTCLKACASSHSLCSNLSSTWSLSEFPSPGPE  
 ATGEAAVMGGPEPHNSEEATDSEKEINRLSILPFPPSAGSILRRQREEDPAPPKRSFSSMSDITGSVTLK  
 PWSPLSSSSSDSVWPLGKPEGLLARGCGLDFLNRSLAIRVSGRSPGPEPQDKGPDGLSFYGDWRWSG  
 AVVRRVLSGPGSARMEPREQRVEAAGLEGACLEAEAQRTLLWNQGSTLPSLMDSKACQSFHEALEAWAK  
 GPGAEPFYIRANLTLPERADPHALCVKAQEILRLVDSAYKRRQEFWCTRVDPLTRDLDRGTVPNYQRAQ  
 QLLEVQEKCLPSSRHRGPRSNLKKRALDQLRLVRPKPVGAPAGDSPDQLLLEPCAEPERSLRPYSLVRPL  
 LVSAALRPVLLPECLAPRLIRNLLDLPSSRLDFVQCPAESLSGEELCPSSAPGAPKAQPATPGLGSRIRA  
 IQESVGGKKHLLLELGARGVRELQNEIYPIVIHVEVTEKNVREVRGLLGRPGWRDSELLRQCRGSEQVLW  
 GLPCSWVQVPAHEWGHAEELAKVVRGRILQEQRARLVWVECGSSRGCPSSSEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6255\\_g12.zip](https://cdn.origene.com/chromatograms/mk6255_g12.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**ACCN:**

NM\_014550

**ORF Size:**

3096 bp

**OTI Disclaimer:**

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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_014550.4](#)

**RefSeq Size:** 3912 bp

**RefSeq ORF:** 3099 bp

**Locus ID:** 29775

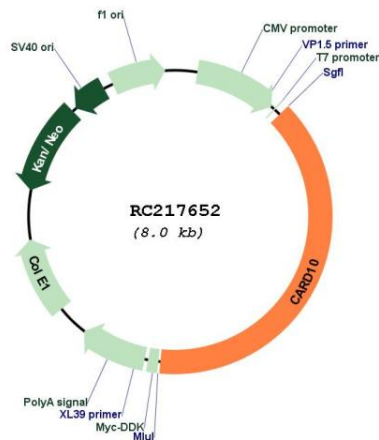
**UniProt ID:** [Q9BWT7](#)

**Cytogenetics:** 22q13.1

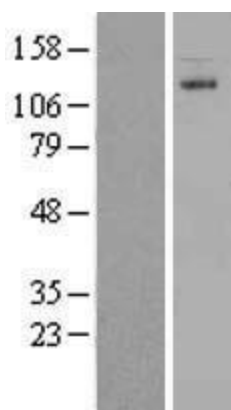
**MW:** 115.8 kDa

**Gene Summary:** The caspase recruitment domain (CARD) is a protein module that consists of 6 or 7 antiparallel alpha helices. It participates in apoptosis signaling through highly specific protein-protein homophilic interactions. Like several other CARD proteins, CARD10 belongs to the membrane-associated guanylate kinase (MAGUK) family and activates NF-kappa-B (NFkB; see MIM 164011) through BCL10 (MIM 603517) (Wang et al., 2001 [PubMed 11259443]).[supplied by OMIM, Mar 2008]

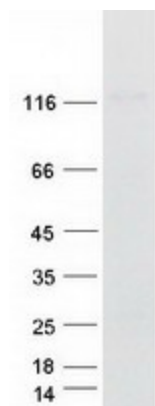
### Product images:



Circular map for RC217652



Western blot validation of overexpression lysate (Cat# [LY415227]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217652 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CARD10 protein (Cat# [TP317652]). The protein was produced from HEK293T cells transfected with CARD10 cDNA clone (Cat# RC217652) using MegaTran 2.0 (Cat# [TT210002]).