

Product datasheet for MR218654

Cdca2 (NM_175384) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdca2 (NM_175384) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdca2
Synonyms:	2610311M19Rik; AI586158
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR218654 representing NM_175384 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGCGAGTTCACACGACAAGCCTCTCTGAATCCAAGGAGTGTGTCCTTAATAATTCTGAAAATG
ACGTTTTTAGATTGGAACTGAACCGTTTGTGACTCCTCAGAAGCATGTAGCAGATGCGACTCCTAATCT
TTGCACCCCTGATACCTTAAGTCACCTTTGGACTTCACCACAGTAACCGTAGAGCAGTTGGGAATTACA
CCTGAAAGCTTTGTTAAGACCTTCCGAAAAGTCAACATCTCCCTTCAGAAGGCCAGGCGCCGCTCCA
CTGTTGGTGTGCGGGCTCTCCAGAAACCAATTGCCTGATCCGATTCATTGCCAGCAGCAAACCTAAA
GAAGGCTGTGCTCTCCGTTGGCAGAGACCCCACTTCGAGGGTAGCCCAAGACTGTATCGAAATGCC
AGTGTTTAAGAGAGCGAATGTCTGCTTTTCGGTCAGCTTTTCACTCCATACAGGAAACTAAGATGGCCA
GCAGTCCCTCAGCAGCAGAGGCAGACGGAGAGTCTAGGATATCAGATTTGACCAGAAAAGAAGATCTTCT
TGAATATCAGCAGTCTGGGTTCCCTGTAACCTCTTCAAAGCGGAGGAGAATATCCTCCCAGGACAGC
CCTGACAATTATCTCAGTGGCACCAAAGCCCTTGTGACGAAGCGTGTGCTGGGGTGCCTCCACAGATC
TTGCTGAGAAATCACCTGACATCGGTTCCGCCCAGCCGGATGCATGGCTGCTCCCTCCAGAGCTCAG
GGAGACTTCCCAGGACTTGCAGTACTGACTGTGTAGAGGGCCCTGTAAACCACTGAGCTCAGGCACA
GCCACTGCCACCAAGTCTCCAGAGACTCCTATGTGCGGGAGCAGACCCCTCCGCTAAGACCACCGCCA
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GTCTGAATCCGAGGAAGAGGAAGAGAGTACTTTTGGAGAGGACTTAAGCCCTGAAGTGTGTTGATGAGTC
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AGGCACTAACACTGCAGTCTTTAAATAAAGATGAAGAAATAATCTGCAGTATTGTTAGACCTACACGG



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ACCTCTCAAAGAAGAAAGCAGACGCTGAGTTCTACAGGTGTTTGACGCTCATATACTACACAAGCTGAGC
 CCCGTAAGAGAAAGATGAGCAGGAGGAAATCTCGAGAAAAAAGCACACAAGCGCGGCACTTCTAAAAA
 GAAACAGGTTTTAAAAAGTTACAGAAAAAAGAAAAAGGGAAAAAAGATGTTGAAAAATGCTTTTATGGG
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 CTCCTCTGGCTGACTGCACGCAGGGGACGAGCTCAGATGATTTCAACAAATGTGGTCAGCTGGAAGAAGT
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 CTGCCC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218654 representing NM_175384
 Red=Cloning site Green=Tags(s)

MDASSHDKPLSESKECVLNSENDFVRLGTEPFVTPQKHVADATPNLCTPDTFKSPDLFTTVTVEQLGIT
 PESFVKTSVGKSTSSLQKARRRSTVGVRSPEINCLIRFIAQQRNLKKAVALSPLAREPHFEGSPRLYRNA
 SVLRERMSAFRSFHSIQETKMASSPSAAEADGESRISDLTRKEDLLEYQQSGFPVNSSKRRRISQDS
 PDNYLSGKALADEACAGGASTDLAEKSPDIGSAQPGCMAAPLPELRETSQGLAVTDCVEGPVTPPLSSGT
 ATATRPETPMCGSSSPSAKTTATRSPATPVCSSSTPSAKTFVLRVSLKPKGLFSENGESNLCDGGAH
 LISYPSNSCKEGRAGRENCKTPGCLNPRKRKRVTFGEDLSPEVFDESLPANTPLCKGGTPVRPRTVKTTT
 PLQSPVHEQFLQPNFDDKEENLENI EPPQGSFANLSLSKSSLSETPPGTNTCSSLNKDEEII CSIVRPTR
 TSQRRKQTLSSGTVCSSYTTQAEPRKEKMSRRKSREKKHTSAALPKKKQVLKSYRKKKKGKDDVEKCFYG
 PRDIASKKPLLSPPELPEVSEATPLADCTQGTSSDDFNKCGQLEEVNSFEIPTQRKRRLPQKADSPELD
 PAHHQSQVSDKCCYLLPLTTASERGNASTRDTGSEGNTRAESKQSAKEPKPGTKMESGLVPRASVTQD
 HIVSKNPKPLGSPQSQDLFKAGQNLNCPCEILIVSESMNLKCEKESECLAPQGSQSPVSTDSKRDLC
 SEDVLIQNIKEPASHSENVGRKCAAGNSPGSGRERKWRRTVCCGGQSSYLEQNGNPASSCSGENFVEIS
 LESVQLIEELSNIEQSFQRTSSKTKVRRSTRLQRDLENTGLVWVSPSPSTLQKPRRRMTICTLDSRGE
 CPSSKEETISSGQNPGLPAVSGSESQGVGSSALPRKRRSLCGSTLTDANSATQPPDCKRKP SLKGESAQ
 LP

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9103_b06.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_175384

ORF Size: 2946 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_175384.4](#), [NP_780593.3](#)

RefSeq Size: 3568 bp

RefSeq ORF: 2949 bp

Locus ID: 108912

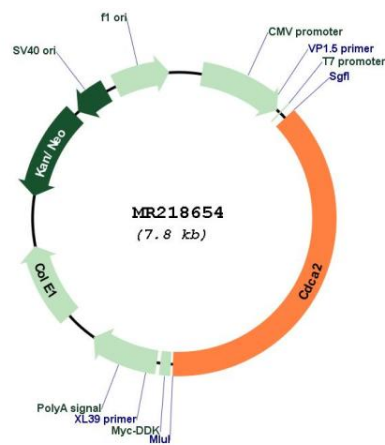
UniProt ID: [Q14B71](#)

Cytogenetics: 14 D1

MW: 106.4 kDa

Gene Summary: Regulator of chromosome structure during mitosis required for condensin-depleted chromosomes to retain their compact architecture through anaphase. Acts by mediating the recruitment of phosphatase PP1-gamma subunit (PPP1CC) to chromatin at anaphase and into the following interphase. At anaphase onset, its association with chromatin targets a pool of PPP1CC to dephosphorylate substrates (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218654