

Product datasheet for RC216388

CDCA2 (NM_152562) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDCA2 (NM_152562) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDCA2
Synonyms:	PPP1R81; Repo-Man
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216388 representing NM_152562 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGCCAATTCAAAAGACAAGCCCCCTGAAACCAAGGAGTCTGCAATGAATAATGCTGGAAATGCCT
CTTTCATTTTGGAACTGGGAAGATTGTGACTCCTCAGAAGCATGCCGAATTACCTCCTAATCCTTGCAC
ACCAGATACTTTAAATCACCTTTGAACCTTCCACAGTAACCGTAGAGCAATTGGGAATTACACCTGAA
AGCTTTGTTAGGAACTCTGCAGGAAAGTCATCCTACCTAAAAATGTAGACGACGTTCTGCAGTCG
GTGCTCGGGGCTCTCCTGAAACAACCATCTGATTGTTTCATTGCTCGGCAGCAAAATATAAAGAATGC
TAGGAAATCTCCTTTGGACAAGATTCTCCTTCCAGGGCAGCCCTGCACTGTATCGAAATGTTAACT
TTAAGAGAACGAATATCAGCCTTCCAGTCAGCTTTTCACTCCATAAAGGAAAACGAGAAAATGACCGGCT
GTCTGGAATTCTCAGAGGCAGGAAAAGAGTCCGAGATGACAGACTTGACCAGAAAGGAAGGTCTCAGCGC
TTGCCAGCAGTCTGGGTTCCCTGCAGTGTGTCTCCAAACGTCGGAGAAATCCTATCAGAGAGACTCT
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CATGTGCAGTTGAAACTTCTGTAGATCTTTCTGAGATATCATCTAACTTGGTTCAACACAGTCTGGATT
TTTAGTTGAAGAGTCTCTTCCCTTTTCAGAGCTCACAGAGACTTCAAATGCACTAAAGGTTGCTGACTGT
GTAGTGGCAAAGGATCAAGTGATGCCGTTTCGCCTGACACGTTACAGCAGAAGTGAGCTCAGACGCAG
TCCTGATGTGAGTCCAGCTACTCCAGCCTGCAGGAGGACCTTCCACCCCAAGACCTTTTGTACT
TCGTTCTGTAAGAAACCCTCTGTTAAGATGTGTCTAGAGAGCTTACAGGAACACTGTAACAACCTC
TATGATGATGATGGGACTCATCCGAGCTTAATCTCAAATCTCCAAACTGTTGCAAAGAGAAAGAAGCAG
AAGATGAAGAAAATTTGAAGCACCTGCCTTTCTAAATATGAGGAAGAGGAAAGAGAGTTACTTTGGAGA
GGACTTAAGCCCGAAGTGTGTTGATGAATCTTTGCCAGCAAATACTCCATTGCGTAAAGGAGGAACACCT
GTTTGTAAGAAAGACTTCAGTGGTCTCAGTCCCTGCTGCTTGAAGCAGTACCTGTTCTGAGCCATTAC
CTCAACCAGATTTGATGACAAGGGGAGAATCTTGAACAATAGAACCACTTCAAGTATCATTGCGGT
TCTCAGTTCCTAATAAATCATCAATCTGAGACCCTTTCAGGCACTGATACCTTTAGTCTTCAAAT



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AACCATGAGAAAATATCCTCTCCTAAAGTTGGTAGAATAACAAGGACTTCTAACAGAAGAAATCAATTGG
 TCAGTGTGTAGAAGAGAGTGTTCGCAACTTATTGAATACAGAAGTTCAGCCTTGTAAAGAAAAGAAAAT
 TAATAGGAGGAAGTCTCAAGAAACAAAGTGTACAAAGAGAGCACTTCTAAGAAGAGTCAGGTTTTAAAA
 AGTTGCAGAAAGAAAGAAAGGAAAGGAAAGAAAGTGTTCAGAAATCTTTATATGGGGAAAGAGACATTG
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 GAGCATCCGAAGACTGGGTTTCAAGTTATTTCAAGTTCAAATGGCAAACCTGGAAGAAGTGAAGACTCCTAAA
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 ATGATGTCTCTGAATTCTGCTCTTATATAAAAAGTTCTCATCGCTTGGCAATGCTACTTCTGATGAAGA
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 TCTACACTTCAAATACTAAAGCCACTTCCAGTTCAAAGGCTACCGGAGAAGATCCTCTCTTAATGGGA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216388 representing NM_152562
 Red=Cloning site Green=Tags(s)

MDANSKDKPPETKESAMNNAAGNASFILGTGKIVTPQKHAEPPNPCTPDTFKSPLNFSTVTEQLGITPE
 SFVRNSAGKSSSYLKKRRRSVARGSPETNHLIRFIARQQNIKNARKSPLAQDSPSQGSPALYRNVNT
 LRERISAFQSAFHSHIKENEKMTGCLFSEAGKESEMTDLTRKEGLSACQQSGFPAPVLSKRRRISYQRDS
 DENLTDAEKVIQLQIFNIDTRACAVETSVDLSEISSKLGSTQSGFLVEESLPLSELTETSNAKLVADC
 VVGKGSDDAVSPDTFTAEVSSDAVPDVRSAPACRRDLPTPKTFVLRVSLKPKSVKMCLESLQEHENNL
 YDDDGTHPSLISNLPNCCKEKEAEDEENFEAPAFNMRKRKRVTFGEDLSPEVFDESPLANTPLRKGTP
 VCKKDFSGLSLLEQSPVPEPLPQPDFDDKGENLENIPLQVSFAVLSPPNKSSISSETLSGTDTFSSSN
 NHEKISSPKVGRITRTSNRRNQLVSVVEESVCNLLNTEVQPCKEKKINRRKSQETKCTKRALPKKSQVLK
 SCRKKKGGKKSQKSLYGERDIAASKPILLSPIPELPEVPEMTPSIPSIIRRLGSGYFSSNGKLEEVKTPK
 NPVKRKDLLRHDPDLHMHQGYDKYDVSEFCYSIKSSSSLGNATSDPNTNIMNINENKNIPKANKKSES
 ENEPKAGTDSVSCASVTEERVAASDPSKPALTLQQGQEF SAGGQNAENLCQFFKISPDLNIKERCDDFL
 GAAEGLQCNRLMPNSQKDCHCLGDVLIENTKESKSQSEDLGRKPMESSVVSQRDRKDRRRSMCYSDGR
 SLHLEKNGNHTPSSSVGSSVEISLENSLFDLSDAIEQTFQRRNSETKVRSTRLQKDLNEGLVWISL
 PLPSTSQAKRRITCTFDSSGFESMSPIKETVSSRQKPMAPPVSDPENSQGAAGSSDEPGKRRKSFCCI
 STLANTKATSQFKGYRRRSSLNGKGESSLTALERIEHNGERKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8017_e06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_152562

ORF Size: 3069 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_152562.4](#)

RefSeq Size: 3735 bp

RefSeq ORF: 3072 bp

Locus ID: 157313

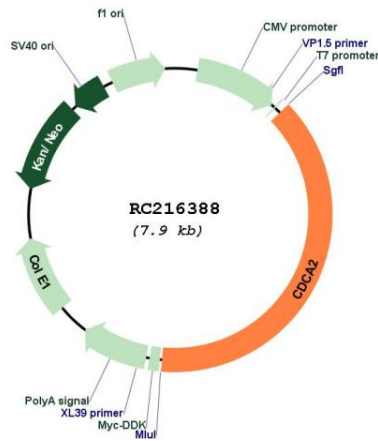
UniProt ID: [Q69YH5](#)

Cytogenetics: 8p21.2

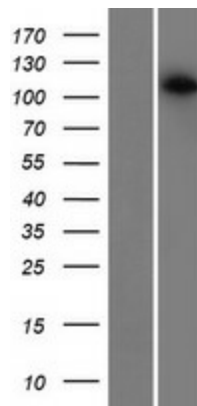
MW: 112.5 kDa

Gene Summary: This gene encodes a targeting subunit of the cell-cycle associated protein, protein phosphatase 1, with a role in targeting this protein to chromatin during anaphase. These two proteins comprise a phosphatase complex that is involved in nuclear envelope reformation and regulation of the DNA damage response. The encoded protein may also play a role in cancer progression. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RC216388



Western blot validation of overexpression lysate (Cat# [LY407470]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216388 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).