

## Product datasheet for **RC203983**

### CDCA4 (NM\_145701) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CDCA4 (NM_145701) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDCA4
Synonyms:	HEPP; SEI-3/HEPP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203983 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGTTTGCACGAGGACTGAAGAGGAAAATGTGTTGGCCACGAGGAAGACGTGGAGGGAGCCCTGGCCGGCT  
TGAAGACAGTGTCTCATACAGCCTGCAGCGGCAGTCGCTCTGGACATGTCTCTGGTGAAGTTGCAGCT  
TTGCCACATGCTTGTGGAGCCCAATCTGTGCCGCTCAGTCCTCATTGCCAACACGGTCCGGCAGATCCAA  
GAGGAGATGACGCAGGATGGGACGTGGCGCACAGTGGCACCCAGGCTGCAGAGCGGGCGCCGCTCGACC  
GCTTGGTCTCCACGGAGATCCTGTGCCGTGCAGCGTGGGGCAAGAGGGGCACATCCTGCTCCTGGCTT  
GGGGACGGCCACACACAGGGTCCAGTTTCTGACCTTTGCCAGTCACCTCAGCACAGGCCACCAAGGCAC  
CTGCAGAGCAGCGCCTGGGAGATGGATGGCCCTCGAGAAAACAGAGGAAGCTTTCACAAGTCACTTGATC  
AGATATTTGAAACGCTGGAGACTAAAAACCCAGCTGCATGGAAGAGCTGTTCTCAGACGTGGACAGCCC  
CTACTACGACCTGGACACAGTACTGACAGGCATGATGGGGGTGCCAGGCCGGGCCCTGCCAAGGGCTC  
GAGGGCTTGGCTCCGGCCACCCAGGCCCTAGCTCCAGCTGCAAGTCCGACCTGGGCGAGCTGGACCAGC  
TGGTGGAGATCCTGGTGGAGACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC203983 protein sequence  
Red=Cloning site Green=Tags(s)

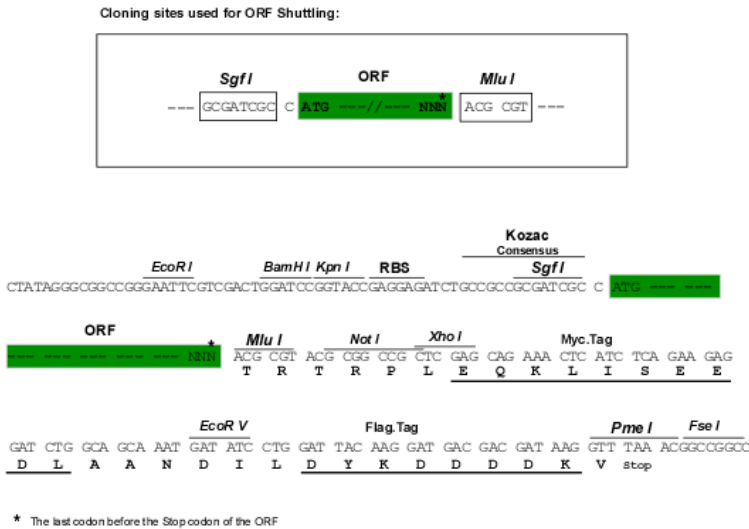
MFARGLKRKCVGHEEDVEGALAGLKTVSSYSLQRQSLLDMSLVKLLQCHMLVEPNLCRSVLIANTVRQIQ  
 EEMTQDGTWRTVAPQAAERAPLDRLVSTEILCRAAWGQEGAHAPGLGDGHTQGPVSDLCPVTSAQAPRH  
 LQSSAWEMDGPRENRSFHKSLDQIFETLETKNPSCMEELFSDVDSPYYDLDTVL TGMGGARPGPCEGL  
 EGLAPATPGPSSSCKSDLGELDHVVEILVET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6422\\_c05.zip](https://cdn.origene.com/chromatograms/mk6422_c05.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_145701

ORF Size: 723 bp

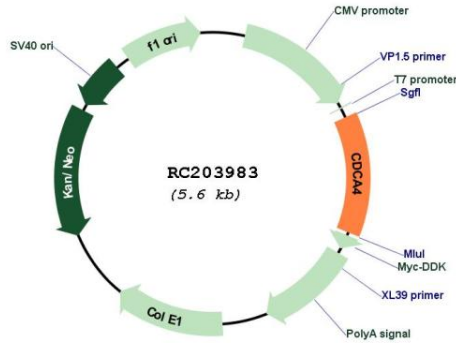
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

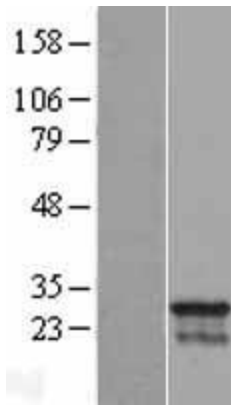
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_145701.1, NP_663747.1</u>
<b>RefSeq Size:</b>	1927 bp
<b>RefSeq ORF:</b>	726 bp
<b>Locus ID:</b>	55038
<b>UniProt ID:</b>	<u>Q9BXL8</u>
<b>Cytogenetics:</b>	14q32.33
<b>Protein Families:</b>	ES Cell Differentiation/IPS
<b>MW:</b>	26.1 kDa
<b>Gene Summary:</b>	<p>This gene encodes a protein that belongs to the E2F family of transcription factors. This protein regulates E2F-dependent transcriptional activation and cell proliferation, mainly through the E2F/retinoblastoma protein pathway. It also functions in the regulation of JUN oncogene expression. This protein shows distinctive nuclear-mitotic apparatus distribution, it is involved in spindle organization from prometaphase, and may also play a role as a midzone factor involved in chromosome segregation or cytokinesis. Two alternatively spliced transcript variants encoding the same protein have been noted for this gene. Two pseudogenes have also been identified on chromosome 1. [provided by RefSeq, May 2014]</p>

Product images:



Circular map for RC203983



Western blot validation of overexpression lysate (Cat# [LY407902]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203983 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).