

## Product datasheet for **RR200086**

### **Cdc14a (NM\_001134856) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cdc14a (NM_001134856) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdc14a
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR200086 representing NM\_001134856  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCAGCGGAGTCAGGGAACTAATCGGGCTTGCAGTTCATGAAAGATCGATTATATTTTGCTACTT  
 TAAGGAATAGACCAAAAAGCACATAAATATCCACTATTTCTCCATCGACGAGGAGCTGGTCTATGAAAA  
 TTTCTATGCAGATTTTGGACCTCTGAACCTGGCAATGGGTACAGATACTGCTGTAAAGCTAAACAAGAAA  
 CTAATAATCATAAGTTTCAAGAAAGAAAATAGTGCCTACACCTCTTTCGACCAGCGGAAAAGAGCAA  
 ACGCAGCATTCTGATAGGTGCTTATGCCGTCATCTACTTAAAGAAGACACCAGAAGAAGCGTACAGAGC  
 TCTCTGTCTGGCTCAAACCTCCTTATCTTCCATTACAGGGATGCGTCTTTGGAAATTGCACCTACAAC  
 CTCACCGTCTTGACTGTTTACAAGGAATCAGAAAGGATTACAGCATGGATTTTTTGGACTTTGAGACAT  
 TTGATGCGGATGAATATGAACACTATGAGCGAGTTGAAAATGGGACTTCAACTGGATCGTTCAGGAAA  
 ATTTTTAGCATTTAGTGGACCACATCTAAAAGCAAAATGAAAATGGTTACCCTCTCCAGCTCCTGAA  
 GCCTACTTTCCGTATTTCAAAAAGAACAACGTGACAACAATCGTGAGATTGAATAAAAAGATTTATGAGG  
 CGAAGCGCTTACAGACGCTGGCTTCGAGCACTACGACCTGTTCTTCATAGATGGCAGCACCCCCAGCGA  
 CAACATCGTGCGAAGATTCTGAACATCTGTGAGAACACGGAGGGGGCCATTGCGGTCCACTGCAAAGCT  
 GGTCTGGGGAGAAGTGGGACTTTGATAGCTGTTACGTGATGAAACACTACAGGTTACACACGCTGAAA  
 TCATCGCTTGGATCAGAAATTTGTCGACCAGGCTCCATCATTGGACCCAGCAGCATTTCCTGGAAGAGAA  
 ACAAGCATCATTGTTGGTCCAAGGAGACATTTTTCGATCCAACTGAAAATAGACCGTCCAGTGAAGGA  
 AGTATTACTAAAATTTCTAGCTTGGATGATATGCTATTGCTGGAACTTATCTAAATACAAAGCA  
 CAGAAAGGATTGGAGAGAATAATTTTGAAGACGAAGATATGAAAATTAAAAACAACGTAACGCAAGGAGA  
 CAAACTACGTGCCTTAAAAAGCCAGAGGACGCCCGCTCCTCGCCATCCTGTGCATTTAGGTGAGATGAT  
 ATGAAAGGACACCAAGGGCAGTGGCCAGACTTTCAGATTAAGTTCTTACCACAACCAACAGTCCCGA  
 CTGTGAAGACCCCAAGTGTGTTGTCCCTTCACTGACAGCCAAAAGGATAAGCAGAGTTCTCTGTGTC  
 TTCAGGAGCAAACATAAGAAGCTTCTCCATAAATCCCGCTAGCCAGTTCCTGGGAACTTGAATTCT  
 GGGACAGAAGAACTGAGAACAAAAGACCACATACCCATCAAGGCTGCTTTCATAGCCAGCCCGTTCA  
 CCAGCTTCTTGAATGGCAGCACCCAGACACCTGGCAGAACTACCCTGAGCTCAACAACAATCAGTACAC  
 CAGAAGCAGCAACAGCAGCAGCGCGGCAGTCTGGGGCAACCTGAACAGCTCTCAAGCGCAAGCCC  
 GAGGAGCATAACACCATCCTTAGACCTTCTTCTCGGGGCGCTCTCTTCTCTCAGTGAAGATTCTGA  
 GCCGTTCTATACCTCCCTTCACTGTAATATGTTTCATTAC

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR200086 representing NM\_001134856  
 Red=Cloning site Green=Tags(s)

MAAESGELIGACEFMKDRLYFATLRNRPKSTINIHYFSIDEELVYENFYADFGPLNLMVYRYCCKLNKK  
 LKSYSLSRKKIVHYTSFDQRKRANAFLIGAYAVIYLLKTPPEAYRALLSGSNPPYLPFRDASFGNCTYN  
 LTVLDCLQGIRKGLQHGFDFEFTDADEYEHYERVENGDFNWI VPGKFLAFSGPHPKSKIENGYPLHAPE  
 AYFPYFKNNVTTIVRLNKKIYEAKRFTDAGFEHYDLFFIDGSTPSDNIVRRFLNICENTEGAIIVHCKA  
 GLGRTGLTIACYVMKHYRFTHAEIIAWIRICRPGSII GPQQHFLEEKQASLWVQGDIFRSKLNKRPSSSE  
 SITKIISSLDDMSIAGNLSKLQSTERIGENNFEDMEIKNNVTQGDKL RALKSQRPSSPSCAFRSD  
 MKGHQRAVAQTFRLSSSPQPTVPTVKTPKVLSPSVTAKRISRGSLSGANIRSFINSRLASSLGNLNS  
 GTEETENKTTSPIKAFAIASPFTSFLNGSTQTPGRNYPELNNNQYTRSSNSSSSGGSLGGNLNSSPSAKP  
 EEHNTILRPSFSGALSSSVRFLSRSIPSLQSEYVHY

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

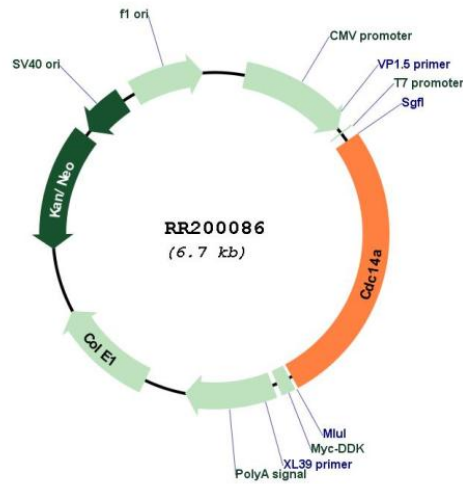
Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:

NM\_001134856

<b>ORF Size:</b>	1791 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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>RefSeq:</b>	<a href="#">NM_001134856.1</a> , <a href="#">NP_001128328.1</a>
<b>RefSeq Size:</b>	4476 bp
<b>RefSeq ORF:</b>	1794 bp
<b>Locus ID:</b>	310806
<b>Cytogenetics:</b>	2q41
<b>MW:</b>	66.9 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a dual-specificity phosphatase that preferentially dephosphorylates cyclin dependent kinase substrates to regulate the cell cycle. In human cell lines, this protein localizes to interphase chromosomes, and depletion of the transcript results in centrosome separation and cytokinesis defects. In mouse, the protein localizes to the nucleus of prophase I arrested oocytes and then becomes dispersed in meiotically competent oocytes. Knockdown of the protein delays exit from metaphase I and results in eggs with chromosomal abnormalities and elevated aneuploidy, demonstrating a function in regulation of meiosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2015]