

## Product datasheet for **RG214674**

### **CDC14B (NM\_033331) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CDC14B (NM_033331) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDC14B
Synonyms:	Cdc14B1; Cdc14B2; CDC14B3; hCDC14B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG214674 representing NM\_033331  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAAGCGGAAAAGCGAGCGCGGTCGAGCTGGGCGCCGCGCCCTGCTCGCGGCGCTGCTCGTCGA  
 CCTCGCCGGGTGTGAAGAAGATCCGCAGCTCCACGCAGCAAGACCGCGCCGCGGGACCCAGGACGA  
 CGTGTACCTGGACATCACCGATCGCCTTTGTTTTGCCATTCTCTACAGCAGACCAAAGAGTGCATCAAAT  
 GTACATTATTTACAGCATAGATAATGAACCTGAATATGAGAACTTCTACGCAGATTTGGACCACTCAATC  
 TGGCAATGGTTTACAGATATTGTTGCAAGATCAATAAGAAATTAAGTCCATTACAATGTTAAGGAAGAA  
 AATTGTTCACTTTACTGGCTCTGATCAGAGAAAACAAGCAATGCTGCCTTCCTTGTGGATGCTACATG  
 GTTATATATTTGGGAGAACCCAGAAGAAGCATATAGAATTAATCTTTGGAGAGACATCCTATATTC  
 CTTTCAGAGATGCTGCCTATGGAAGTTGCAATTTCTACATTACACTTCTTGACTGTTTTTCATGCAGTAAA  
 GAAGGCAATGCAGTATGGCTTCCTTAATTTCAACTCATTTAACCTTGATGAATATGAACACTATGAAAA  
 GCAGAAAATGGAGATTTAAATTGGATAATACCAGACCGATTTATTGCCTTCTGTGGACCTCATTCAAGAG  
 CCAGACTTGAAAGTGTTACCACCAACATTCTCCTGAGACTTATATTCAATATTTAAGAATCACAATGT  
 TACTACCATTTTCGCTGAATAAAAGGATGTATGATGCCAAACGCTTTACGGATGCTGGCTTCGATCAC  
 CATGATCTTTTCTTTGCGGATGGCAGCACCCCTACTGATGCCATTGTCAAAGAATTCCTAGATATCTGTG  
 AAAATGCTGAGGGTGCCATTGCAGTACATTGCAAAGCTGGCCTTGGTCGCACGGGCACTCTGATAGCCTG  
 CTACATCATGAAGCATTACAGGATGACAGCAGCCGAGACCATTGCGTGGGTCAGGATCTGCAGACCTGGC  
 TCGGTGATTGGCCTCAGCAGCAGTTTTGGTGATGAAGCAAACAACCTCTGGCTGGAAGGGGACTATT  
 TTCGTCAGAAGTTAAAGGGGCGAGAGAATGGACAACACAGAGCAGCCTTCTCAAACCTTCTCTGCGCT  
 TGATGACATTTCCATAAATGGGGTCGAGAATCAAGATCAGCAAGAACCAGAACCGTACAGTGATGATGAC  
 GAAATCAATGGAGTGACACAAGGTGATAGACTTCGGGCCTTGAAAAGCAGAAGACAATCCAAAACAACG  
 CTATTCCTCTCACAGTAATCTTCAATCCAGTGTTCAGAGCTGTAAAACATCTGAACCTAACATTTCTGG  
 CAGTGCAGGCATTACTAAAAGAACCACCAGATCTGCTTCAAGGAAAAGCAGTGTTAAAAGTCTCTCCATT  
 TCAAGGACTAAAACAGTCTTGCCT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG214674 representing NM\_033331  
 Red=Cloning site Green=Tags(s)

MKRKSERSSWAAAPCSRCSSTSPGVKKIRSSSTQDPRRRDPQDDVYLDITDRLCFAILYSRPKSASN  
 VHYFSIDNELEYENFYADFGPLNLAMVYRYCCKINKKLSITMLRKKIVHFTGSDQRKQANAFLVGCYM  
 VIYLGRTPEEAYRILIFGETSYIPFRDAAYGSCNFYITLLDFHAVKKAMQYGFNLFNSFNLDEYEHYK  
 AENGLNWIIPDRFIAFCGPHSRARLESYHQHSPETYIQYFKNHVTTIIRLNKRYDAKRFDTAGFDH  
 HDLFFADGSTPTDAIVKEFLDICENAEGAIAVHCKAGLGRGTGLIACYIMKHRYMTAAETIAWVRI CRPG  
 SVIGPQQQFLVMKQTNLWLEGDYFRQKLKGQENGQHRAAFSKLLSGVDDISINGVENQDQEQPEPYSDD  
 EINGVTQGDRLRALKSRRQSKTNAIPLTVILQSSVQSKTSEPNI SSGSAGITKRTTRSASRSVKSLSI  
 SRTKTVLR

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

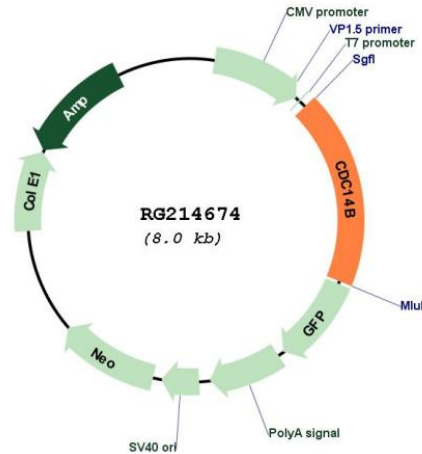
Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI  
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT  
  
 HindIII NheI RsrII MluI NotI XhoI GFP Tag  
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---  
 T R T R P L E M E S D - - -  
  
 PmeI FseI  
 --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT  
 - - E E R V Stop

Plasmid Map:



**ACCN:** NM\_033331

**ORF Size:** 1494 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>RefSeq:</b>	<a href="#">NM_033331.4</a>
<b>RefSeq Size:</b>	5589 bp
<b>RefSeq ORF:</b>	1497 bp
<b>Locus ID:</b>	8555
<b>UniProt ID:</b>	<a href="#">O60729</a>
<b>Cytogenetics:</b>	9q22.32-q22.33
<b>Domains:</b>	Y_phosphatase, DSPc, PTPc_motif
<b>Protein Families:</b>	Druggable Genome, Phosphatase
<b>Protein Pathways:</b>	Cell cycle
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a member of the dual specificity protein tyrosine phosphatase family. This protein is highly similar to <i>Saccharomyces cerevisiae</i> Cdc14, a protein tyrosine phosphatase involved in the exit of cell mitosis and initiation of DNA replication, which suggests the role in cell cycle control. This protein has been shown to interact with and dephosphorylates tumor suppressor protein p53, and is thought to regulate the function of p53. Alternative splice of this gene results in 3 transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]</p>