

Product datasheet for **RG221121**

CDC14B (NM_003671) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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)



ORF Nucleotide Sequence: >RG221121 representing NM_003671
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGAAGCGGAAAAGCGAGCGGCGGTGAGCTGGGCCGCCGCCGCCCTGCTCGCGGCGCTGCTCGTCGA
 CCTCGCCGGGTGTGAAGAAGATCCGCAGCTCCACGCAGCAAGACCCGCGCCGCCGGGACCCCGAGGACGA
 CGTGTACCTGGACATCACCGATCGCCTTTGTTTGGCATTCTCTACAGCAGACCAAGAGTGCATCAAAT
 GTACATTATTTACAGATAGATAATGAACCTGAATATGAGAATTCTACGCAGATTTTGGACCACTCAATC
 TGGCAATGGTTTACAGATATTGTTGCAAGATCAATAAGAAATTAAGTCCATTACAATGTTAAGGAAGAA
 AATTGTTTCAATTTTACTGGCTCTGATCAGAGAAAACAAGCAATGCTGCCTTCTTGTGGATGCTACATG
 GTTATATATTTGGGAGAACCACAGAGCATATAGAATATTAATCTTTGGAGAGACATCCTATATTC
 CTTTCAGAGATGCTGCCTATGGAAGTTGCAATTTCTACATTACACTTCTTGACTGTTTTCATGCAGTAA
 GAAGGCAATGCAGTATGGCTTCTTAATTTCAACTCATTTAACCTTGATGAATATGAACACTATGAAAA
 GCAGAAAAATGGAGATTTAAATTGGATAATACCAGACCGATTATTGCCTTCTGTGGACCTCATTCAGAG
 CCAGACTTGAAAGTGGTTACCACCAACATTCTCTGAGACTTATATTCAATATTTAAGAATCACAATGT
 TACTACCATTATTCGTCTGAATAAAAGGATGTATGATGCCAAACGCTTTACGGATGCTGGCTTCGATCAC
 CATGATCTTTTCTTTCGGATGGCAGCACCCTACTGATGCCATTGTCAAGAATTCCTAGATATCTGTG
 AAAATGCTGAGGGTGCCATTGCAATGCAAGCTGGCCTTGGTCGCACGGGCACTCTGATAGCCTG
 CTACATCATGAAGCATTACAGGATGACAGCAGCCGAGACCATTGCGTGGGTGAGGATCTGCAGACCTGGC
 TCGGTGATTGGCCTCAGCAGCAGTTTTTGGTGATGAAGCAAACCAACCTCTGGCTGGAAGGGGACTATT
 TTCGTCAGAAGTTAAAGGGCAGGAGAATGGACAACACAGAGCAGCCTTCTCCAACTTCTCTCTGGCGT
 TGATGACATTTCCATAAATGGGGTCGAGAATCAAGATCAGCAAGAACCCGAACCGTACAGTGATGATGAC
 GAAATCAATGGAGTGACACAAGGTGATAGACTTCGGGCCTTGAAAAGCAGAAGACAATCCAAAACAAACG
 CTATTCCTCTCACTCTCTCCATTTCAGGACTAAAACAGTCTTGCGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

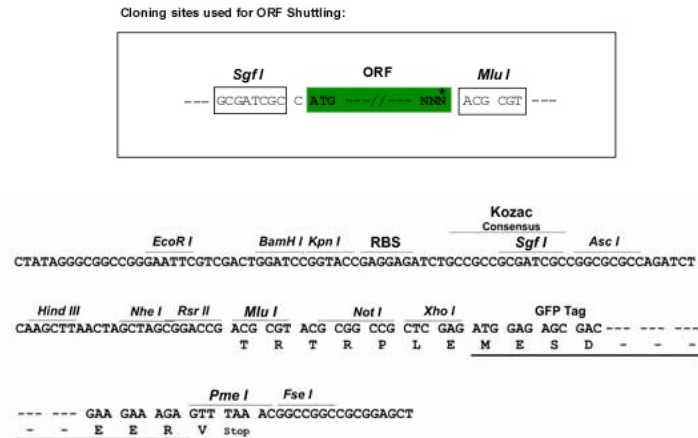
Protein Sequence: >RG221121 representing NM_003671
 Red=Cloning site Green=Tags(s)

MKRKSERSSWAAAPCSRRCSSTSPGVKKIRSSSTQQDPRRRDPQDDVYLDITDRLCFAILYSRPKSASN
 VHYFSIDNELEYENFYADFGLNLAMVYRYCCKINKKLKSITMLRKKIVHFTGSDQRKQANAFLVGYM
 VIYLGRTPEEAYRILIFGETSYIPFRDAAYGSCNFYITLLDCFHAVKKAMQYGLNFNSFNLDEYEHYK
 AENGDLNWIIPDRFIAFCGPHSRARLESGYHQHSPETYIQYFKNHNVTTIIRLNKRMVDKRFSTDAGFDH
 HDLFFADGSTPTDAIVKEFLDICENAEIAVHCKAGLGRTGLIACYIMKHYRMTAAETIAWVRICRPG
 SVIGPQQQFLVMKQTNLWLEGDYFRQKLKGQENGQHRAAFSKLLSGVDDISINGVENQDQPEPEYSDDD
 EINGVTQGDRLRALKSRRQSKTNAIPLTSLISRTKTVLR

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_003671

ORF Size: 1377 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.

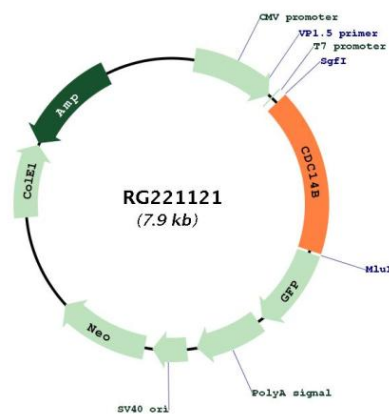
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003671.5](#)

RefSeq Size:	5472 bp
RefSeq ORF:	1380 bp
Locus ID:	8555
UniProt ID:	O60729
Cytogenetics:	9q22.32-q22.33
Domains:	Y_phosphatase, DSPc, PTPc_motif
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	Cell cycle

Gene Summary: The protein encoded by this gene is a member of the dual specificity protein tyrosine phosphatase family. This protein is highly similar to *Saccharomyces cerevisiae* 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]

Product images:



Circular map for RG221121