

## Product datasheet for **RG206814**

### CDC6 (NM\_001254) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CDC6 (NM_001254) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDC6
Synonyms:	CDC18L; HsCDC6; HsCDC18; MGORS5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG206814 representing NM\_001254  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCTCAAACCCGATCCAGGCACAGGCTACAATCAGTTTTCCAAAAGGAAGCTGTCTCGGGCATTGA  
 ACAAGCTAAAACTCCAGTGATGCCAACTAGAACCAACAATGTCCAAACCGTAACCTGTTCTCCTCG  
 TGTAAGGCCCTGCCTCTCAGCCCCAGGAAACGCTGGGCGATGACAACCTATGCAACACTCCCCATTTA  
 CCTCCTTGTCTCCACAAAGCAAGGCAAGAAAGAGAATGGTCCCCCTCACTCACATACCTTAAGGGAC  
 GAAGATTGGTATTTGACAATCAGCTGACAATTAAGTCTCTAGCAAAAGAGAAGCTAGCCAAAGTTACCA  
 AAACAAAATACTTTCTCAGTTAGAAAAAGTCAAGAGATCACAACAAATCTGAGCAGAGATGTCCACTG  
 AAGAAAGAATCTGCATGTGTGAGACTATTCAAGCAAGAAGGCACTTGCTACCAGCAAGCAAGCTGGTCC  
 TGAACACAGCTGTCCAGATCGGCTGCCAGGAAAGGAGATGGATGTCATCAGGAATTTCTTGAG  
 GGAACACATCTGTGGAAAAAGCTGGAAGCCTTACCTTCTGGTGCTCCTGGAAGTGGAAAACTGCC  
 TGCTTAAGCCGGATTCTGCAAGACCTCAAGAAGGAACTGAAAGGCTTTAAACTATCATGCTGAATTGCA  
 TGTCTTGAGGACTGCCAGGCTGATTCCAGCTATTGCTCAGGAGATTTGTCAGGAAGAGGTATCCAG  
 GCCAGCTGGGAAGGACATGATGAGGAAATTGAAAAACATATGACTGCAGAGAAGGGCCCATGATTGTG  
 TTGGTATTGGACGAGATGGATCAACTGGACAGCAAGGCCAGGATGATTGTACACGCTATTTGAATGGC  
 CATGGCTAAGCAATCTCACTTGGTGCTGATTGGTATTGCTAATACCCTGGATCTCACAGATAGAATTCT  
 ACCTAGGCTTCAAGCTAGAGAAAAATGTAAGCCACAGCTGTTGAACCTCCACCTTATACCAGAAATCAG  
 ATAGTCACTATTTTGAAGATCGACTTAATCAGGTATCTAGAGATCAGGTTCTGGACAATGCTGCAGTTC  
 AATTCTGTGCCCGAAAGTCTCTGCTGTTTCAGGAGATGTTCCGAAAGCACTGGATGTTGCAAGGAGC  
 TATTGAAATTGTAGAGTCAGATGTCAAAAGCCAGACTATTCTCAAACCACTGTCTGAATGTAATCACCT  
 TCTGAGCCTGATTCCCAAGAGGGTGGTCTTATTACATATCCCAAGTCACTCAGAAATTGATGGTA  
 ACAGGATGACCTTGAGCCAAGAAGGAGCACAAGATTCCCTCCCTCTCAGCAGAAGATCTTGGTTTGCTC  
 TTTGATGCTCTTGATCAGGCAGTTGAAAATCAAAGAGGTCAGTCTGGGGAAGTTATGAAGCCTACAGT  
 AAAGTCTGTGCAAAACAGCAGGTGGCGGCTGTGGACCAGTCAAGTGTGTTGCTCCTTTCAGGCTCTTGG  
 AAGCCAGGGCATTGTTAGGATTAAGAGAAACAAGGAAACCCGTTTGACAAAGGTGTTTTCAAGATTGA  
 AGAAAGAAATAGAACATGCTCTGAAAGATAAAGCTTTAATTGAAATATCTTAGCTACTGGATTGCC

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:**

>RG206814 representing NM\_001254  
 Red=Cloning site Green=Tags(s)

MPQTRSQAQATISFPKRKLSRALNKAKNSSDAKLEPTNVQTVTCSPRVKALPLSPKRKLGDDNLNTPHL  
 PPCSPPKQKENGPPHSHTLKGRRLVFDNQLTIKSPSKRELAKVHQNKILSSVRKSQEITTNSEQRCP  
 KKEACVRLFKQEGTCYQAKLVLNTAVPDRLPAREREMDVIRNFLREHICGKKAGSLYLSGAPGTGKTA  
 CLSRILQDLKELKGFKIMLNCMSLRTAQAVFPAIAQEQEEVSRPAGKDMRKLKHMATAEKGP  
 MIVLVLDEMDQLDSKQDVLVTLFEWPWLSNSHLVLIIGIANTLDLDRILPRLQAREKCKPQLLNFP  
 PYTRNQIVTILQDRLNQVSRDQVLDNAAVQFCARKVSAVSGDVRKALDVCRRRAIEIVESDVKSQ  
 TILKPLSECKSPSEPLIPKRVGLIHSQVISEIDGNRMTLSEGAQDSFPLQKILVCSLMLLIRQL  
 KIKEVTLGKLYEAYSKVCRKQVVAVDQSECLSLGILLEARGILGLKRNKETRLTKVFFKIEEKEIE  
 HALKDKALIGNILATGLP

**TRTRPLE - GFP Tag - V**

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001254

ORF Size: 1680 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\\_001254.3](#), [NP\\_001245.1](#)

RefSeq Size: 3053 bp

RefSeq ORF: 1683 bp

Locus ID: 990

UniProt ID: [Q99741](#)

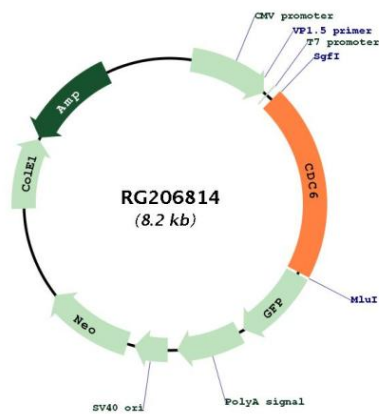
**Cytogenetics:** 17q21.2

**Domains:** AAA, AAA

**Protein Pathways:** Cell cycle

**Gene Summary:** The protein encoded by this gene is highly similar to *Saccharomyces cerevisiae* Cdc6, a protein essential for the initiation of DNA replication. This protein functions as a regulator at the early steps of DNA replication. It localizes in cell nucleus during cell cycle G1, but translocates to the cytoplasm at the start of S phase. The subcellular translocation of this protein during cell cycle is regulated through its phosphorylation by Cdks. Transcription of this protein was reported to be regulated in response to mitogenic signals through transcriptional control mechanism involving E2F proteins. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG206814