

Product datasheet for **SC119336**

CDC6 (NM_001254) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC6 (NM_001254) Human Untagged Clone
Tag:	Tag Free
Symbol:	CDC6
Synonyms:	CDC18L; HsCDC6; HsCDC18; MGORS5
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC119336 sequence for NM_001254 edited (data generated by NextGen Sequencing)

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ATGCCTCAAACCCGATCCCAGGCACAGGCTACAATCAGTTTTCCAAAAGGAAGCTGTCT
CGGGCATTGAACAAAGCTAAAACTCCAGTGATGCCAACTAGAACCAACAAATGTCCAA
ACCGTAACCTGTTCTCCTCGTGTAAAAGCCCTGCCTCTCAGCCCCAGGAAACGTCTGGG
GATGACAACCTATGCAACACTCCCCATTACCTCCTTGTCTCCACCAAAGCAAGGCAAG
AAAGAGAATGGTCCCCCTACTCACATACACTTAAGGGACGAAGATTGGTATTTGACAAT
CAGCTGACAATTAAGTCTCCTAGCAAAAAGAGAAGCTAGCCAAAGTTCACCAAAAACAAATA
CTTTCTCAGTTAGAAAAAGTCAAGAGATCACAACAAATTCTGAGCAGAGATGTCCACTG
AAGAAAGAATCTGCATGTGTGAGACTATTCAAGCAAGAAGGCACTTGCTACCAGCAAGCA
AAGCTGGTCTGAACACAGCTGTCCAGATCGGCTGCCTGCCAGGGAAAGGGAGATGGAT
GTCATCAGGAATTTCTGAGGGAACACATCTGTGGGAAAAAGCTGGAAGCCTTTACCTT
TCTGGTCTCCTGGAAGTGGAAAACTGCCTGCTTAAGCCGGATTCTGCAAGACCTCAAG
AAGGAAGTGAAGGCTTTAAAATATCATGCTGAATTGCATGTCCTTGAGGACTGCCAG
GCTGTATCCCAGCTATTGCTCAGGAGATTTGTCAGGAAGAGGTATCCAGGCCAGCTGGG
AAGGACATGATGAGGAAATTGGAAAAACATATGACTGCAGAGAAGGGCCCATGATTGTG
TTGGTATTGGACGAGATGGATCAACTGGACAGCAAGGCCAGGATGTATTGTACACGCTA
TTTGAATGGCCATGGCTAAGCAATTCTCACTTGGTGTGATTGGTATTGTAATACCCTG
GATCTCACAGATAGAATTCTACCTAGGCTTCAAGCTAGAGAAAAATGTAAGCCACAGCTG
TTGAACTCCCACCTTATACCAGAAATCAGATAGTCACTATTTTGCAAGATCGACTTAAT
CAGGATCTAGAGATCAGGTTCTGGACAATGCTGCAGTTCAATTTGTGCCCGCAAAGTC
TCTGCTGTTTCAGGAGATGTTTCGCAAAGCACTGGATGTTTGCAGGAGAGCTATTGAAAT
GTAGATCAGATGTCAAAGCCAGACTATTCTCAAACCCTGCTGAATGTAATCAGCT
TCTGAGCCTCTGATTCCCAAGAGGGTTGGTCTTATTCACATATCCCAAGTCATCTCAGAA
GTTGATGGTAACAGGATGACCTTGAGCCAGAAGGAGCACAAGATTCTTCCCTTTCAG
CAGAAGATCTTGGTTTGTCTTTGATGCTCTTGATCAGGCAGTTGAAAATCAAAGAGGTC
ACTCTGGGGAAGTTATATGAAGCCTACAGTAAAGTCTGTGCAACAGCAGGTGGCGGCT
GTGGACCAGTCAGAGTGTGTCACCTTTCAGGGCTCTTGGAAAGCCAGGGCATTTTAGGA
TTAAAGAGAAACAAGGAAACCCGTTTGACAAAGGTGTTTTTCAAGATTGAAGAGAAAGAA
ATAGAACATGCTCTGAAAGATAAAGCTTTAATTGGAAATATCTTAGCTACTGGATTGCCT
TAA
    
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Clone variation with respect to NM_001254.3

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_001254 unedited
NCCGGTTCAAATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGGCTTGT
GGTGGTGAGTCCGAGAGGCTGCGTGTGAGAGACGTGAGAAGGATCCTGCCTGAGGAGGT
GGAAAGAAGAGGATTGCTCGAGGAGGCTGGGGTCTGTGAGGCAGCGGAGCTGGGTGAAG
GCTGCGGGTCCGGCGAGGCCTGAGCTGTGCTGTGCTCATGCCTCAAACCCGATCCCAGG
CACAGGCTACAATCAGTTTTCCAAAAGGAAGCTGTCTCGGGCATTGAACAAAGCTAAAA
ACTCCAGTGATGCCAACTAGAACCAACAAATGTCCAAACCGTAACCTGTTCTCCTCGTG
TAAAAGCCCTGCCTCTCAGCCCCAGGAAACGTCTGGGCGATGACAACCTATGCAACACTC
CCCATTTACCTCCTTGTCTCCACCAAAGCAAGGCAAGAAAGAGAATGGTCCCCCTCACT
CACATACACTTAAGGGACGAAGATTGGTATTTGACAATCAGCTGACAATTAAGTCTCCTA
GCAAAAGAGAAGTCCAAAGTTACCAAAAACAAATACTTTCTCAGTTAGAAAAGTC
AAGAGATCACAACAAATTCTGAGCAGAGATGTCCACTGAAGAAAGAAATCTGCATGTGTGA
GACTATTCAAGCAAGAAGGCACTTGCTACCAGCAAGCAAGCTGGTCTGAAACACAGCTG
TCCCAGATCGGCTGCCTGCNCAGGAAAGGGAGATGGATGTCATCAGGAATTTCTGAGGG
AACACATCTGTGGGAAAAAGCTGGAAGCCTTTACCTTTCTGGTGTCTGCTGNACTGGAAA
ACTGCCTGCTTAAGCCGNATTCTGNCAGACCTCAAGAAGGAACTGAAAGGCTTTAAACTA
TCTGCT
    
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3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001254 unedited ACCGCGGGCCGCAATTTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTGGCACTTGAAAATAA ATATATTCACAATCTGTAGAGTTATAGTCTCCTTATGACCCCAACGCCCTTGGGAGTGCC CAAGAACTCAACGAGTCTAAAAATGCCACAATGTTGTAGTATCTGCACCATGAACATAGT ATACTATACAAAGAAATAAATTCCTTTAACCCAGTGCCTCCAAATCTCCATGTGGACTTGC TTGCATTTTTCTGGATCATTTTTATTCTTACCCTAAACTTAAAGTTCTTAACAAAAT ACCTTAATGGCTGAGCATGGTGGCTCACGCCTATAATCCCAGCACTTAGGGAGGCCAAGG TGGGCAGATCACTTGAGGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTAAAACCTT GTCTCTACTAAAAATTAATAAATACCTGGGCGCGGTGGTGGGCACCTGTAATCCCAGCT ACTCGGGAGGCTGAGGCAAGAGAATCACTTCAACCTGGGAAGCGGGCGCTGACTGAGCA AAGAACGCGCCATTGCACTCCAGCCTGTGCAACAGGGTGAGACGCGCCTCAAAAACAACA CCACCAACACACACAACAAAAAATCCCACTCATGCTTGAGCCAACGAACAGGCAAAC ATCCACCCATTCTCTACACAGATCTGTACCCTTGCCAGCACATTGGCTAAAGATACACA AGTGGCACAACCACCGACTGCAACAAAAAGGCCTTCTGGTAACCTTTAGGGCACAAAT AGTTACACCCATACATTTTACTCCGTGCTCATTTCAAAGAACCCTACACTAACACCATT TGGCTCTAAGTCAAAACGGCTAATTTGCTTTCAGGCCCGAAGGGTCAACCCTTAAAGAAA ACTGTACTCTTATATGCCCCGTACACTTTCCTGGGGCGAACAAAAACATTACGGCATC CT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_001254
Insert Size:	2870 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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]