

Product datasheet for **RG239636**

CDC27 (NM_001293089) Human Tagged ORF Clone

Product data:

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|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | CDC27 (NM_001293089) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | CDC27 |
| Synonyms: | ANAPC3; APC3; CDC27Hs; D0S1430E; D17S978E; H-NUC; HNUC; NUC2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide
Sequence:

>RG239636 representing NM_001293089.
Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGACGGTGTGCAGGAACCCGTCAGGCTGCTATATGGCAAGCACTAAACCCTATGCTTACCGAGAT
GCGGTTTTCTCGCAGAACGCCTTTATGCAGAAGTACACTCAGAAGAAGCCTTGTCTTACTGGCAACC
TGTTATTACCGCTCAGGAAAGGCATATAAAGCATATAGACTCTTGAAAGGACACAGTTGTACTACACCG
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CTTCCAGATGATGAGGACCAATAACCCAAGAAGAACAGATCATGGGAACAGATGAATCCAGGAGAGC
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
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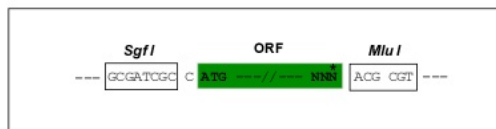
Protein Sequence: >Peptide sequence encoded by RG239636
Blue=ORF Red=Cloning site Green=Tag(s)

MTVLQEPVQAAIWQALNHAYRDAVFLAERLYAEVHSEELFLLATCYRSGKAYKAYRLLKGHSCTTP
QCKYLLAKCCVDLSKLAEGEQILSGGVFNKQKSHDDIVTEFGDSACFTLSLLGHVYCKTDRLAKGSECY
QKSLSLNPFLLWSPFESLCEIGEKPDPDQTFKFTSLQNF SNCLPNSCTTQVPHSLSHRQPETVL TETPQ
DTIELNRLNLESSNSKYSLNTDSSVSYIDSAVISPDTVPLGTGTSILSKQVQNKPKTGRSLLGPAALS
PLTPSFGILPLETPSPGDGQSYLQNYTNTPPVIDVPSTGAPSKKSVARIGQTGKSVFSQSGNSREVTPI
LAQTQSSGPQTSTTPQVLSPTITSPNALPRSSRLFTSDSSTTKENSKKLMKFPPKIPNRKTKSKTN
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INILSHLPSHHYNTGWLCQIGRAYFELSEYMQAERIFSEVRRRIENYRVEGMEIYSTTLWHLQKDVALS
VLSKDLTDMDKNSPEAWCAAGNCFSLQREHDIAIKFFQRAIQVDPNYAYAYTLLGHEFVLTEELDKALA
CFRNAIRVNPRHYNAYWGLGMIYYKQEKFLAEMHFQKALDINPQSSVLLCHIGVVQHALKKSEKALDT
LNKAIVIDPKNPLCKFHRASVLFANEKYKSALQEELELKQIVPKESLVYFLIGKVYKKGQTHLALMNF
SWAMDLDPKGANNQIKEAIDKRYLPDDEEPIQTQEEQIMGTDESQESSMTDADDTQLHAAESDEF
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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 ACGGCCGGCCGCGGAGCT
 - - - E E R V Stop

ACCN: NM_001293089

ORF Size: 2469 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.

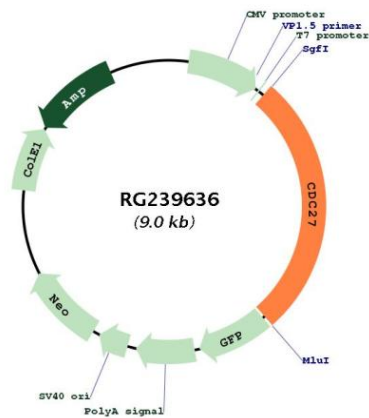
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

RefSeq: [NM_001293089.3](#)

RefSeq Size: 5850 bp
RefSeq ORF: 2472 bp
Locus ID: 996
Cytogenetics: 17q21.32
Protein Families: Druggable Genome
Protein Pathways: Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation, Ubiquitin mediated proteolysis
MW: 92.2 kDa

Gene Summary: The protein encoded by this gene shares strong similarity with *Saccharomyces cerevisiae* protein Cdc27, and the gene product of *Schizosaccharomyces pombe* nuc 2. This protein is a component of the anaphase-promoting complex (APC), which is composed of eight protein subunits and is highly conserved in eukaryotic cells. This complex catalyzes the formation of cyclin B-ubiquitin conjugate, which is responsible for the ubiquitin-mediated proteolysis of B-type cyclins. The protein encoded by this gene and three other members of the APC complex contain tetratricopeptide (TPR) repeats, which are important for protein-protein interactions. This protein was shown to interact with mitotic checkpoint proteins including Mad2, p53CDC and BUBR1, and it may thus be involved in controlling the timing of mitosis. Alternative splicing of this gene results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 2, 22 and Y. [provided by RefSeq, May 2014]

Product images:



Circular map for RG239636