

## Product datasheet for **RG213034**

### **CDC27 (NM\_001256) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CDC27 (NM_001256) 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)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG213034 representing NM\_001256  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGACGGTGTGCAGGAACCCGTCAGGCTGCTATATGGCAAGCACTAAACCACTATGCTTACCGAGATG  
 CGGTTTTCTCGAGAAGCCTTTATGCAGAAGTACACTCAGAAGAAGCCTTGTTTTACTGGCAACCTG  
 TTATTACCGCTCAGGAAAAGGCATATAAAGCATATAGACTCTTGAAAGGACACAGTTGTAACACCGCAA  
 TGCAAATACCTGCTTGCAAAATGTTGTGTGATCTCAGCAAGCTTGCAAGGGGAACAAATCTTATCTG  
 GTGGAGTGTAAATAAGCAGAAAAGCCATGATGATATTGTTACTGAGTTTGGTGATTGAGCTTGTCTTAC  
 TCTTTCATTGTTGGGACATGTATATTGCAAGACAGATCGGCTTGCCAAAGGATCAGAATGTTACCAAAAAG  
 AGCCTTAGTTAAATCCTTCTCTGGTCTCCCTTTGAATCATTATGTGAAATAGGTGAAAAGCCAGATC  
 CTGACCAACATTTAAATTCACATCTTTACAGAAGCTTTAGCAACTGTCTGCCAACTCTTGACAACACA  
 AGTACCTAATCATAGTTTATCTCACAGACAGCCTGAGACAGTTCTTACGAAAACACCCAGGACACAATT  
 GAATTAACAGATTGAATTTAGAATCTTCCAATTCAAAGTACTCCTTGAATACAGATTCCCTCAGTGTCTT  
 ATATTGATTGAGCTGTAATTTACCTGATACTGTCCCCTGCGAACAGGAACCTCCATATTATCTAAACA  
 GGTTCAAATAAACCAAAAAGCTGGTGAAGTTTATTAGGAGGACCAGCAGCTCTTAGTCCATTAACCCCA  
 AGTTTTGGGATTTGCCATTAGAAAACCCCAAGTCTGGAGATGGATCCTATTTACAAAACACTACTAATA  
 CACCTCCTGTAATTGATGTGCCATCCACCGGAGCCCTTCAAAAAGTCTGTTGCCAGAATCGGCCAAAC  
 TGGAAACAAAGTCTGTCTTCTCACAGAGTGGAAATAGCCGAGAGGTAACCTCAATCTTGCACAAACACAA  
 AGTTCTGGTCCACAAACAAGTACAACACCTCAGGTATTGAGCCCACTATTACATCTCCCCAACCGCAC  
 TGCCCTCGAAGAAGTTACGACTCTTACTAGTGACAGCTCCACAACCAAGGAGAATAGCAAAAATTTAAA  
 AATGAAGTTTCCACCTAAAATCCCAACAGAAAACAAAAGTAAAACCTAATAAAGGAGGAATAACTCAA  
 CCTAACATAAATGATAGCCTGGAATTAACAAAATGGACTCTTCCATCTTTAGAAAGGAAAATATCCA  
 CAATCACACCTCAGATTCAGGCCTTAACTACAAAAAGCAGCAGCAGCAGGTTTGTGAGCCTTCTTCG  
 TGAAATGGGAAAGGTTATTTAGCTTTGTGTTCACTAACAAGTATAAATATTTGAGCCAT  
 CTACCTTCTCACCCTACAATACTGGTTGGTACTGTGCCAAATGGAAGGCCTATTTGAACTTTGAG  
 AGTACATGCAAGCTGAAAGAATATTCTCAGAGGTTAGAAGGATTGAGAATTATAGAGTTGAAGGCATGGA  
 GATCTACTCTACAACACTTTGGCATCTTCAAAAAGATGTTGCTCTTTGAGTTCTGTCAAAGACTTAACA  
 GACATGGATAAAAATTCGCCAGAGCCTGGTGTGCTGCAGGGAAGTGTTCAGTCTGCAACGGGAACATG  
 ATATTGCAATTAATTTCTCCAGAGAGCTATCCAAGTTGATCCAATACGCTTATGCTATACTCTATT  
 AGGGCATGAGTTTGTCTTAAGTGAAGAATTGGACAAAGCATTAGCTTGTTTTCGAAATGCTATCAGAGTC  
 AATCCTAGACATTATAATGCATGGTATGGTTTAGGAATGATTTATTACAAGCAAGAAAAATTCAGCCTTG  
 CAGAAATGCATTTCAAAAAGCGCTTGATATCAACCCTCAAAGTTGAGTTTACTTTGCCACATTGGAGT  
 AGTTCAACATGCACTGAAAAATCAGAGAAGGCTTTGGATACCCTAAACAAGCCATTGTCATTGATCCC  
 AAGAACCCTCTATGCAATTTACAGAGCCTCAGTTTTATTTGCAATGAAAAATATAAGTCTGCTTTAC  
 CAAGAAGTTAGGTCAAACGCACCTCGCCCTGATGAATTTCTTTGGGCTATGGATTTAGATCCTAAAGGA  
 GCCAATAACAGATTAAGAGGCAATTGATAAGCGTTATCTTCCAGATGATGAGGAGCCAATAACCCAAG  
 AAGAACAGATCATGGAAACAGATGAATCCAGGAGAGCAGCATGACAGATGCGGATGACACACAACCTTCA  
 TGCAGCTGAAAGTATGAATTT

**ACGGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

Protein Sequence: >RG213034 representing NM\_001256  
 Red=Cloning site Green=Tags(s)

MTVLQEPVQAAIWQALNHAYRDAVFLAERLYAEVHSEEALFLLATCYRSGKAYKAYRLLKGHSCTTPQ  
 CKYLLAKCCVDLSKLAEGEQILSGGVFNKQKSHDDIVTEFGDSACFTLSLLGHVYCKTDRLAKGSECYQK  
 SLSLNPFLWSPFESLCEIGEKDPDQTFKFTSLQNF SNCLPNSCTTQVPNHSLSHRQPETVLTETPQDTI  
 ELNRLNLESSNSKYSLNTDSSVSYIDSAVISPDTPVPLGTGTSILSKVQNKPKTGRSLLGGPAALSPLTP  
 SFGILPLETPSPGDGSYLQNYTNTPPVIDVPSTGAPSKKSVARIQGTGKSVFSQSGNSREVTPILAQTQ  
 SSGPQTSTTPQVLSPTITSPNALPRRSSRLFTSDSSTTKENSKLKMFPKIPNRKTKSKTNKGGITQ  
 PNINDSLEITKLDSSIISEGKISTITPQIQAFNLQAAAAGLMSLLREMGKGYLALCSYNCKEAINILSH  
 LPSHHYNTGWVLCQIGRAYFELSEYMQAERIFSEVRRRIENYRVEGMEIYSTTLWHLQKDVALSVLSKDLT  
 DMDKNSPEAWCAAGNCFSLQREHDAIKFFQRAIQVDPNYAYAYTLLGHEFVLTEELDKALACFRNAIRV  
 NPRHYNAWYGLGMIYYKQEKFLAEMHFQKALDINPQSSVLLCHIGVVQHALKKSEKALDTLNKAIVIDP  
 KNPLCKFHRSVLFANEKYKSALQELEELKQIVPKESLVYFLIGKVYKLGQTHLALMNF SWAMDLDPKG  
 ANNQIKEAIDKRYLPDDEEPITQEEQIMGTDESQESSMTDADDTQLHAAESDEF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001256

ORF Size: 2472 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\\_001256.2](#), [NP\\_001247.2](#)

**RefSeq Size:** 3277 bp

**RefSeq ORF:** 2475 bp

**Locus ID:** 996

**UniProt ID:** [P30260](#)

**Cytogenetics:** 17q21.32

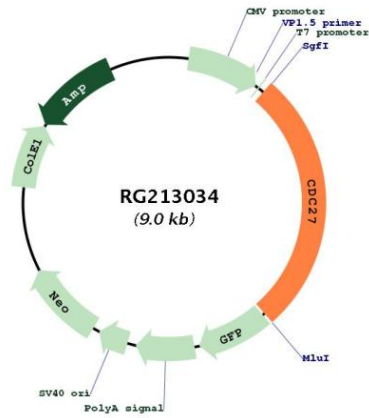
**Domains:** TPR

**Protein Families:** Druggable Genome

**Protein Pathways:** Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation, Ubiquitin mediated proteolysis

**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 RG213034