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Product datasheet for RC239512

CDC27 (NM_001293091) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC27 (NM_001293091) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDC27
Synonyms:	ANAPC3; APC3; CDC27Hs; D0S1430E; D17S978E; H-NUC; HNUC; NUC2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>RC239512 representing NM_001293091
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAAGCACTAAACCACTATGCTTACCGAGATGCGGTTTTCCTCGCAGAACGCCTTTATGCAGAAGGC
TTGCAGAAGGGGAACAAATCTTATCTGGTGGAGTGTTTAATAAGCAGAAAAGCCATGATGATATTGTTAC
TGAGTTTGGTGATTCAGCTTGCTTTACTCTTTCATTGTTGGGACATGTATATTGCAAGACAGATCGGCTT
GCCAAAGGATCAGAATGTTACCAAAAGAGCCTTAGTTTAAATCCTTTCCTCTGGTCTCCCTTTGAATCAT
TATGTGAAATAGGTGAAAAGCCAGATCCTGACCAAACATTTAAATTCACATCTTTACAGAACTTTAGCAA
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CTTACGGAAACACCCCAGGACACAATTGAATTAAACAGATTGAATTTAGAATCTTCCAATTCAAAGTACT
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AAAGTCTGTTGCCAGAATCGGCCAAACTGGAACAAAGTCTGTCTTCTCACAGAGTGGAAATAGCCGAGAG
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ACTGTTTCAGTCTGCAACGGGAACATGATATTGCAATTAAATTCTTCCAGAGAGCTATCCAAGTTGATCC
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CGTTTACTTCTTAATAGGAAAGGTTTACAAGAAGTTAGGTCAAACGCACCTCGCCCTGATGAATTTCTCT
TGGGCTATGGATTTAGATCCTAAAGGAGCCAATAACCAGATTAAAGAGGCAATTGATAAGCGTTATCTTC
CAGATGATGAGGAGCCAATAACCCAAGAAGAACAGATCATGGGAACAGATGAATCCCAGGAGAGCAGCAT
GACAGATGCGGATGACACACAACTTCATGCAGCTGAAAGTGATGAATTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

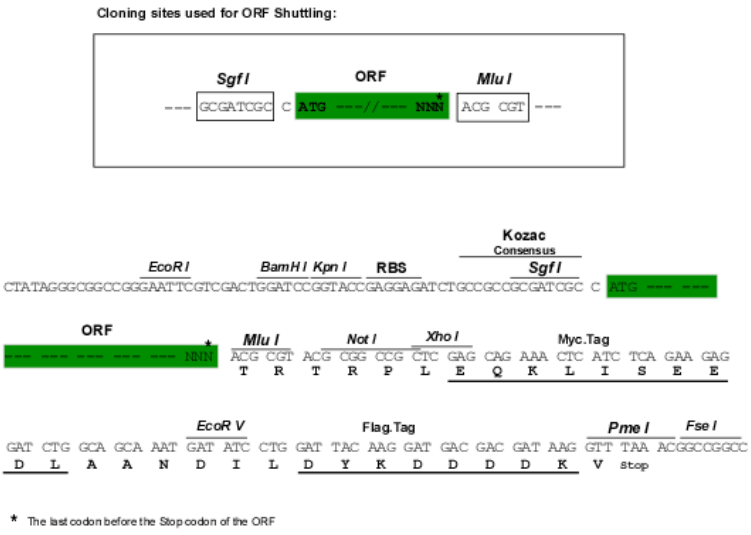
>RC239512 representing NM_001293091
Red=Cloning site Green=Tags(s)

MASTKPLCLPRCGFPRRTPLCRRLAEGEQILSGGVFNKQKSHDDIVTEFGDSACFTLSLLGHVYCKTDRL
AKGSECYQKSLSLNPFLWSPFESLCEIGEKPDPDQTFKFTSLQNFSNCLPNSCTTQVPNHSLSHRQPETV
LTETPQDTIELNRLNLESSNSKYSLNTDSSVSYIDSAVISPDTVPLGTGTSILSKQVQNKPKTGRSLLGG
PAALSPLTPSFGILPLETPSPGDGSYLQNYTNTPPVIDVPSTGAPSKKSVARIGQTGTKSVFSQSGNSRE
VTPILAQTQSSGPQTSTTPQVLSPTITSPPNALPRRSSRLFTSDSSTTKENSKKLKMKFPPKIPNRKTKS
KTNKGGITQPNINDSLEITKLDSSIISEGKISTITPQIQAFNLQKAAAEGLMSLLREMGKGYLALCSYNC
KEAINILSHLPSHHYNTGWVLCQIGRAYFELSEYMQAERIFSEVRRIENYRVEGMEIYSTTLWHLQKDVA
LSVLSKDLTDMDKNSPEAWCAAGNCFSLQREHDIAIKFFQRAIQVDPNYAYAYTLLGHEFVLTEELDKAL
ACFRNAIRVNPRHYNAWYGLGMIYYKQEKFSLAEMHFQKALDINPQSSVLLCHIGVVQHALKKSEKALDT
LNKAIVIDPKNPLCKFHRASVLFANEKYKSALQELEELKQIVPKESLVYFLIGKVYKKLGQTHLALMNFS
WAMDLDPKGANNQIKEAIDKRYLPDDEEPITQEEQIMGTDESQESSMTDADDTQLHAAESDEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

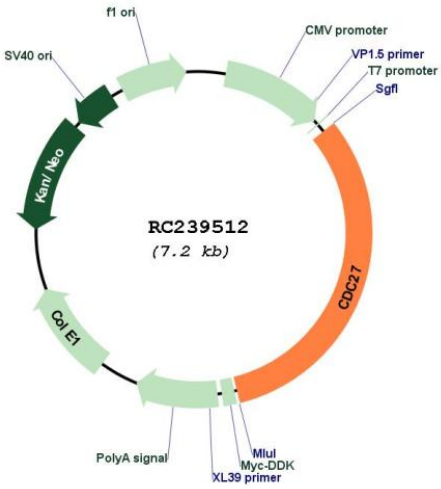
Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001293091
ORF Size:	2289 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_001293091.3
RefSeq Size:	5705 bp
RefSeq ORF:	2292 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:	85.3 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, p55CDC 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]