

Product datasheet for **RC231593**

CDK2AP1 (NM_001270434) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CDK2AP1 (NM_001270434) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CDK2AP1
Synonyms: doc-1; DOC1; DORC1; p12DOC-1; ST19
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC231593 representing NM_001270434
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCAACGTCTTCACAGTACCGCCAGCTGCTCAGTGACTACGGGCCACCGTCCCTAGGCTACCCCAGG
GAACTGGGAACAGCCAGGTGCCCAAAGCAAATACGCGGAGCTGCTGGCCATCATTGAAGAGCTGGGGAA
GGAGATCAGCCACGTACGCAGGGAGCAAGAGTGCCATGGAGAGGCTGAAGCGCGGCATCATTACGCT
AGAGGACTGGTTCGGGAGTGCTTGGCAGAAACGGAACGGAATGCCAGATCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC231593 representing NM_001270434
Red=Cloning site Green=Tags(s)

MATSSQYRQLLSDYGPPSLGYTQGTGNSQVPQSKYAELLAIEELGKEIRPTYAGSKSAMERLKRGIHA
RGLVRECLAETERNARS

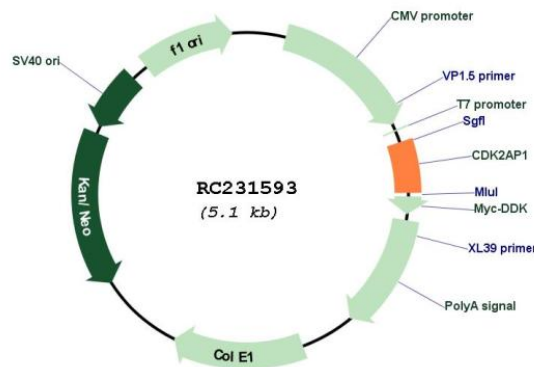
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001270434

ORF Size: 261 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:	<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:	<u>NM_001270434.1</u> , <u>NP_001257363.1</u>
RefSeq Size:	1164 bp
RefSeq ORF:	264 bp
Locus ID:	8099
UniProt ID:	<u>O14519</u>
Cytogenetics:	12q24.31
MW:	10.1 kDa
Gene Summary:	The protein encoded by this gene is a cyclin-dependent kinase 2 (CDK2) -associated protein which is thought to negatively regulate CDK2 activity by sequestering monomeric CDK2, and targeting CDK2 for proteolysis. This protein was found to also interact with DNA polymerase alpha/primase and mediate the phosphorylation of the large p180 subunit, which suggests a regulatory role in DNA replication during the S-phase of the cell cycle. This protein also forms a core subunit of the nucleosome remodeling and histone deacetylation (NURD) complex that epigenetically regulates embryonic stem cell differentiation. This gene thus plays a role in both cell-cycle and epigenetic regulation. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2012]