

## Product datasheet for **SC117244**

### CDK2AP1 (NM\_004642) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CDK2AP1 (NM_004642) Human Untagged Clone
Tag:	Tag Free
Symbol:	CDK2AP1
Synonyms:	doc-1; DOC1; DORC1; p12DOC-1; ST19
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117244 sequence for NM_004642 edited (data generated by NextGen Sequencing)

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ATGTCTTACAAACCGAAGCTTGGCCGCGCACATGCCCGCCGCCCTCAACGCCGCTGGG
AGTGTCCTACTCGCCTTCCACCAGCATGGCAACGTCTTACAGTACCGCCAGCTGCTCAGT
GACTACGGGCCACCGTCCCTAGGCTACACCCAGGGAAGTGGGAACAGCCAGGTGCCCAA
AGCAAATACGCGGAGCTGCTGGCCATCATTGAAGAGCTGGGGAAGGAGATCAGACCCACG
TACGCAGGGAGCAAGAGTGCCATGGAGAGGCTGAAGCGCGGCATCATTACGCTAGAGGA
CTGGTTCGGGAGTGCTTGGCAGAAACGGAACGGAATGCCAGATCCTAG
```

Clone variation with respect to NM\_004642.2



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_004642 unedited</p> <pre>GGTTCAAATTTGTAACGACTCATATAGGCGGCCGNAATTCGCACGAGGCCTCGTGCC GAATTCGGCAGGAGGCCCGGGGGGATGTCTTACAAACCGAAGTTGGCCGCGCACAT GCCCGCCGCCCTCAACGCCGCTGGGAGTGTCCACTCGCCTCCACCAGCATGGCAAC GTCTTACAGTACCGCCAGCTGCTCAGTACTACGGGCCACCGTCCCTAGGCTACACCCA GGGAAGTGGGAACAGCCAGGTGCCCAAAGCAAATACGGGAGCTGCTGGCCATCATTGA AGAGCTGGGGAAGGAGATCAGACCCACGTACGCAGGGAGCAAGAGTGCCATGGAGAGGCT GAAGCGCGGCATATTCACGCTAGAGGACTGGTTCGGGAGTGTGGCAGAAACGGAACG GAATGCCAGATCCTAGCTGCCTTGTGGTTTTGAAGATTTCCATCTTTTACAAGATGA GAAGTTACAGTTCATCTCCCTGTTTACAGATGAAACCCCTGTTTTCAAATGGTTACAGTT TCGTTTTTCTCCATGGTTTCACTTGGCTCTGAACCTACAGTCTCAAAGATTGAGAAAAG ATTTTGCAGTTAATTAGGATTTGCATTTAAGTAGTTAGGAACTGCCNAGTTTTTTTTG TTTTTAAAGCATTGATTTAAAAGATGCACGGGAAAGTATCTTACAGCANACTGTAGTTG CCTCCAAGACACCCATGTCTCCCTTAAAATCTCTTTGGATACATTTGTACCCATGG GGTGTCTTNTCCNTTTCATAGCTAATACACTGTAGGGTNAATTTGTTTTGACGCATATTG ACAGCACGCTTTACTTAGTAGCCGTTCCCATTTGCCATACAATGTAAGGNTCTGCTAAT GTACTIONTTTTTGGCTAAGCATTGCATGACTATTAATGGCTTCAAGTCAATTTT</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_004642 unedited</p> <pre>NNNNNAAAANNNTTTTTCTTTAGGANCGCGNCCGCATTCTANNGATCGGTTTTTTTTT TTTTTTTTTTTTTAAATAAAAAAAGCTTTATTACATCAAGTAATAAATACATACAAAG ATGCAACAGTTTTAGTCATTTTCTCCAGATGTTTTTATCAACTTACAATAAACGCAGA ACTGAGATCTACTTACAGTCTTAGTATGAAAGTGTTCGGGGTCCCTTGTAGTTTGGTG GGTTGCTCTTCTCTGTATTTATAACTTGTGCATTTTTAAAAATTGACTTTGAAGCACT AATAGTCATGCAATGCTTAAGCAAAAAAGAAGTACATTAAGCAGAACCTACATTGTATG GCAATGGGAACCCGCTACTAAGTAAAGCGTGTGTCAATATGCGTTCAAAACAAAATCC CTACAGTGGTATTTAGCTTATGAAAGGGACAAAGANCACNTGGGTAACAAATGTTTTCC AAAAGAGAAGATAAAGGGAGACCATGTTGTCTTGGAGCAAACCTACCGTTTGTGTAAAAT AACTTCCGGGCATCTTTTAAATCAATGCTTAAAAACAAAAAACCTGGGCAAGTCCCT ACTTACTAAATGGCAATCCTAATATACCGCAAACCTTTTTTAACTTTTAACTTGAGGGT CAAAGCCAGTAACCTTGGGAGGAAAAACAACTGTGACCCTTTGAAAACAAGGTTTATTT TAACGGGGGAAAGAACTGGACCTCTTATTTGAAAAGAGGGAACCTTTAAACCCAGGG CGTAGGATTGGGTTCCGTCCTTTTTGGGAAACCTCCCCACAAGCCTTTTAGGGAAAGG CCCCGGTTAACCTCTCAGGGGCTTGGCCCCGTGGACGGGGGTAATCCTTTCCCTTTTA AAAGGGGCCCCCTCCCTTTTTTTTTGGGCCCGGGGTCCCCACCTGGGGGAACCGGGAG GGGGGCCCTAATTA</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_004642
<b>Insert Size:</b>	1180 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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\\_004642.2](#), [NP\\_004633.1](#)

**RefSeq Size:** 1627 bp

**RefSeq ORF:** 348 bp

**Locus ID:** 8099

**UniProt ID:** [O14519](#)

**Cytogenetics:** 12q24.31

**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]  
Transcript Variant: This variant (1) represents the longest transcript and encodes the longer protein (isoform 1).