

## Product datasheet for **SC312700**

### CDK2 (NM\_052827) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CDK2 (NM\_052827) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** CDK2  
**Synonyms:** CDKN2; p33(CDK2)  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL5  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_052827 edited  
 CAACATTGTTTCAAGTTGGCCAAATTGACAAGAGCGAGAGGTATACTGCGTTCCATCCCC  
 ACCCGGGGCCACGGTACTGGCCCTGTTTCCCCCTCCTCGGCCCCGAGAGCCAGGGTCC  
 GCCTTCTGCAGGGTTCCAGGCCCCCGCTCCAGGGCCGGGCTGACCCGACTCGCTGGCGC  
 TTCATGGAGAACTTCCAAAAGGTGAAAAAGATCGGAGAGGGCACGTACGGAGTTGTGTAC  
 AAAGCCAGAAACAAGTTGACGGGAGAGGTGGTGGCGCTTAAGAAAATCCGCCTGGACACT  
 GAGACTGAGGGTGTGCCAGTACTGCCATCCGAGAGATCTCTGCTTAAGGAGCTTAAC  
 CATCCTAATATTGTCAAGCTGCTGGATGTCATTACACAGAAAATAAACTCTACCTGGTT  
 TTTGAATTTCTGCACCAAGATCTCAAGAAATTCATGGATGCTCTGCTCTACTGGCATT  
 CCTCTTCCCCTCATCAAGAGCTATCTGTTCCAGCTGCTCCAGGGCCTAGCTTTCTGCCAT  
 TCTCATCGGGTCTCCACCGAGACCTTAAACCTCAGAATCTGCTTATTAACACAGAGGGG  
 GCCATCAAGCTAGCAGACTTTGGACTAGCCAGAGCTTTTGGAGTCCCTGTTTCGTACTION  
 ACCCATGAGGTGACTCGCCGGGCCCTATTCCCTGGAGATTCTGAGATTGACCAGCTCTTC  
 CGGATCTTTCGGACTCTGGGGACCCAGATGAGGTGGTGTGGCCAGGAGTTACTTCTATG  
 CCTGATTACAAGCCAAGTTTCCCAAGTGGGCCCGGAAGATTTTAGTAAAGTTGTACCT  
 CCCCTGGATGAAGATGGACGGAGCTTGTATCGCAAATGCTGCACTACGACCCTAACAG  
 CGGATTTTCGGCAAGGCAGCCCTGGCTCACCTTTCTTCCAGGATGTGACCAAGCCAGTA  
 CCCCATCTTCGACTCTGATAGCCTTCTTGAAGCCCCAGCCCTAATCTCACCTCTCCTC  
 CAGTGTGGGCTTGACCAGGCTTGGCCTTGGGCTATTTGGACTCAGTGGGCCCTGGAAC  
 TTGCCTTAAACACTCACCTTCTAGTCTTGGCCAGCCAACCTGGAATACAGGGGTGAAA  
 GGGGGAACCAAGTAAAAAGAAAGGAAAGTTTCAGTATTAGATGCACTTAAGTTAGCCTCC  
 A

**Restriction Sites:** Please inquire  
**ACCN:** NM\_052827  
**Insert Size:** 1300 bp



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<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>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_052827.1</a> , <a href="#">NP_439892.1</a>
<b>RefSeq Size:</b>	2226 bp
<b>RefSeq ORF:</b>	795 bp
<b>Locus ID:</b>	1017
<b>UniProt ID:</b>	<a href="#">P24941</a>
<b>Cytogenetics:</b>	12q13.2
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Cell cycle, Oocyte meiosis, p53 signaling pathway, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Small cell lung cancer
<b>Gene Summary:</b>	<p>This gene encodes a member of a family of serine/threonine protein kinases that participate in cell cycle regulation. The encoded protein is the catalytic subunit of the cyclin-dependent protein kinase complex, which regulates progression through the cell cycle. Activity of this protein is especially critical during the G1 to S phase transition. This protein associates with and regulated by other subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A), and p27Kip1 (CDKN1B). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]</p> <p>Transcript Variant: This variant (2, also known as CDK2deltaT) lacks an alternate in-frame exon, compared to variant 1. The encoded isoform (2, also known as d-HSCDK2) is shorter than isoform 1.</p>