

Product datasheet for SC334717

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OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CDK2 (NM_001290230) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CDK2 (NM_001290230) Human Untagged Clone

Tag: Tag Free Symbol: CDK2

Synonyms: CDKN2; p33(CDK2)

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001290230, the custom clone sequence may differ by one or

more nucleotides

ATGGAGAACTTCCAAAAGGTGGAAAAGATCGGAGAGGGCACGTACGGAGTTGTACAAAGCCAGAAACA
AGTTGACGGGAGAGGTGGTGGCGCTTAAGAAAATCCGCCTGGACACGCTGCTGGATGTCATTCACACAGA
AAATAAACTCTACCTGGTTTTTGAATTTCTGCACCAAGATCTCAAGAAATTCATGGATGCCTCTGCTCTC
ACTGGCATTCCTCTCCCCTCATCAAGAGCTATCTGTTCCAGCTGCTCCCAGGGCCTAGCTTTCTGCCATT
CTCATCGGGTCCTCCACCGAGACCTTTAAACCTCAGAATCTGCTTATTAACACAGAGGGGGCCATCAAGCT
AGCAGACTTTGGACTAGCCAGAGCTTTTGGAGTCCCTGTTCGTACTTACACCCATGAGGTGACTCGCCGG
GCCCTATTCCCTGGAGATTCTGAGATTGACCAGCTCTTCCGGATCTTTCGGACTCTGGGGACCCCAGATG
AGGTGGTGTGGCCAGGAGTTACTTCTATGCCTGATTACAAGCCAAGTTTCCCCAAGTGGGCCCGGCAAGA
TTTTAGTAAAGTTGTACCTCCCCTGGATGAAGATGGACGGAGCTTGTTATCGCAAATGCTGCACTACGAC
CCTAACAAGCGGATTTCGGCCAAGGCAGCCCTGGCTCACCCTTTCTCCAGGATGTGACCAAGCCAGTAC
CCCATCTTCGACTCTGA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001290230

OTI Disclaimer: 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).





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: <u>NM 001290230.1</u>, <u>NP 001277159.1</u>

RefSeq Size: 2121 bp
RefSeq ORF: 717 bp
Locus ID: 1017
UniProt ID: P24941
Cytogenetics: 12q13.2

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Cell cycle, Oocyte meiosis, p53 signaling pathway, Pathways in cancer, Progesterone-

mediated oocyte maturation, Prostate cancer, Small cell lung cancer

Gene Summary: 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]

Transcript Variant: This variant (3) lacks two alternate in-frame exons, compared to variant 1.

The encoded isoform (3) is shorter than isoform 1.