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Product datasheet for SC109060

CDK2 (NM_001798) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDK2 (NM_001798) 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 ORF sequence for NM_001798 edited
CGGCCGCGAATTCGGCACGAGGCAACATTGTTTCAAGTTGGCCAAATTGACAAGAGCGAG
AGGTATACTGCGTTCCATCCCGACCCGGGGCCACGGTACTGGGCCCTGTTTCCCCCTCCT
CGGCCCCCGAGAGCCAGGGTCCGCCTTCTGCAGGGTTCCCAGGCCCCCGCTCCAGGGCCG
GGCTGACCCGACTCGCTGGCGCTTCATGGAGAACTTCCAAAAGGTGGAAAAGATCGGAGA
GGGCACGTACGGAGTTGTGTACAAAGCCAGAAACAAGTTGACGGGAGAGGTGGTGGCGCT
TAAGAAAATCCGCCTGGACACTGAGACTGAGGGTGTGCCCAGTACTGCCATCCGAGAGAT
CTCTCTGCTTAAGGAGCTTAACCATCCTAATATTGTCAAGCTGCTGGATGTCATTCACAC
AGAAAATAAACTCTACCTGGTTTTTGAATTTCTGCACCAAGATCTCAAGAAATTCATGGA
TGCCTCTGCTCTCACTGGCATTCCTCTTCCCCTCATCAAGAGCTATCTGTTCCAGCTGCT
CCAGGGCCTAGCTTTCTGCCATTCTCATCGGGTCCTCCACCGAGACCTTAAACCTCAGAA
TCTGCTTATTAACACAGAGGGGGCCATCAAGCTAGCAGACTTTGGACTAGCCAGAGCTTT
TGGAGTCCCTGTTCGTACTTACACCCATGAGGTGGTGACCCTGTGGTACCGAGCTCCTGA
AATCCTCCTGGGCTGCAAATATTATTCCACAGCTGTGGACATCTGGAGCCTGGGCTGCAT
CTTTGCTGAGATGGTGACTCGCCGGGCCCTATTCCCTGGAGATTCTGAGATTGACCAGCT
CTTCCGGATCTTTCGGACTCTGGGGACCCCAGATGAGGTGGTGTGGCCAGGAGTTACTTC
TATGCCTGATTACAAGCCAAGTTTCCCCAAGTGGGCCCGGCAAGATTTTAGTAAAGTTGT
ACCTCCCCTGGATGAAGATGGACGGAGCTTGTTATCGCAAATGCTGCACTACGACCCTAA
CAAGCGGATTTCGGCCAAGGCAGCCCTGGCTCACCCTTTCTTCCAGGATGTGACCAAGCC
AGTACCCCATCTTCGACTCTGATAGCCTTCTTGAAGCCCCCAGCCCTAATCTCACCCTCT
CCTCCAGTGTGGGCTTGACCAGGCTTGGCCTTGGGCTATTTGGACTCAGGTGGGCCCTCT
GAACTTGCCTTAAACACTCACCTTCTAGTCTTGGCCAGCCAACTCTGGGAATACAGGGGT
GAAAGGGGGGGAACCAGTGAAAATGAAAGGAAGTTTCAGTATTAGATGCACTTAAGTTAG
CCTCCA

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001798 unedited
TGTAATACGACTCACTATAGGGNNNCGGCCGCGAATTCGGCACGAGGCAACATTGTTTCA
AGTTGGCCAAATTGACAAGAGCGAGAGGTATACTGCGTTCCATCCCGACCCGGGGCCACG
GTACTGGGCCCTGTTTCCCCCTCCTCGGCCCCCGAGAGCCAGGGTCCGCCTTCTGCAGGG
TTCCCAGGCCCCCGCTCCAGGGCCGGGCTGACCCGACTCGCTGGCGCTTCATGGAGAACT
TCCAAAAGGTGGAAAAGATCGGAGAGGGCACGTACGGAGTTGTGTACAAAGCCAGAAACA
AGTTGACGGGAGAGGTGGTGGCGCTTAAGAAAATCCGCCTGGACACTGAGACTGAGGGTG
TGCCCAGTACTGCCATCCGAGAGATCTCTCTGCTTAAGGACGCTTAACCATCCTAATATT
GTCAAGCTGCTGGATGTCATTCACACAGAAAATAAACTCTACCTGGTTTTTGAATTTCTG
CACCAAGATCTCAAGAAATTCATGGATGCCTCTGCTCTCACTGGCATTCCTCTTCCCCTC
ATCAAGAGCTATCTGTTCCAGCTGCTCCAGGGCCTAGCTTTCTGCCATTCTNCATCGGTC
CTCCACCGAGACCTTANACCTCAGAATCTGCTTATTAACACAGAGGGGGCCATCAAGCTA
GCAGACTTTGGACTAACCAGAGCTTTTGGAGTCCCTGTTCGTACTTACACCCATGAGGTG
GTGACCCTGTGGTCCCGAGCNTCCTGAAATCCTCCTGGGCTGNCAATATTATCCCACAGC
TTGTGGACATCTTGGAGCCTGGGCTGCATCTTTGCTGAGATGGTGACTTCGCCGCCCCTA
TTCCCTGGAGATTCTGAGATTGACCAGCTCTTCCGGTATCTTCNGACTCTGGNGACCCAN
ATGAGGTGGTGTGGCCAGNAATACTCNATGNCTGATACAGCCAGTTTCCCAGTGGCCCGC
AG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001798 unedited
TGCCATTTTTTTAAGATTTACAAACTAAATTACAAATAACGTTAATAGCAAGAGCACTCA
AGTACAGGGTGACAGAGACAAATTATAAAAAAAAAAAGCCCTTTTTTCTTTAGTACTGCCA
TTACAAAATCTCAATGTGCACATGGTAACAAATCCACCCACTATGACCAAAAAAAAAAAA
AAAATCTAACTTTACTATTGGATATAACCCCAAATATCAATACAATCGCCTATGCTCCCT
TTAAACAAATATTCCCACCCTGCCCTCTCTCTCTCCCCATCTTCAAAAATCGCCATTATT
CTTTACAATGATGCTCAACTTTTACTTTTAACTTTCTATGGCGTCTCTCTTCTTTCCTCC
TTTTCTTTTTTTCTCCTTTCCCTTTCCCCCTTTTCCCCCCTTCCATCTTTTCCCCCCCCT
TTTTCCCCCTTCCCCCTTTCCCCCCTCCCCTCCCCCCCCTTTTCCCTTTTTCCCCATCCA
TTTTTTCCCCCATTTCCCCCCCCCTTTTATTTTCCCTTTTCTTCCCTTCATTTCCCCCCCT
CCTTTTTCCATTTCCCTCCTCTTCCCTTTTTTCCCTTCCCTCCCCCCTCCCCCTTTTCTT
TTCCCCTTCTTTCCCCCCCCCCCCCTTTCCCTCCCCCCCCCCTCCCCCTTTTTCTTCCCC
CCCTTTCCCCCCCCCTTCCTACTTATCCTTATTTTTTCCTTCCCCCATCCCCCCCCCCCC
TTTTTTCCACCTTTTTCTCTCCCCCCCCCCCCTTTTTCCCCCCCCCCCTCTCCGCTTTCC
CTTCCCTTTCTCCCCCTTTCCCCTCCCTTTCTTTTCACCCCATTCCCCTACCCCTCTCTC
TTCCTTTTTTCCTTATTCTCCCCCCACCCTTTTCTTTTTTTTTTACTCCCTCCCCTGTCC
CCCCCTTTTCTTTCTTCCCCCCTGTTTCTTTATCCCCCCCCTATTCCCCTCTTCCCTTTT
CCCGCTCACCCTTTCCN

Restriction Sites: NotI-NotI

ACCN: NM_001798

Insert Size: 2190 bp

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:	NM_001798.2, NP_001789.2
RefSeq Size:	2328 bp
RefSeq ORF:	897 bp
Locus ID:	1017
UniProt ID:	P24941
Cytogenetics:	12q13.2
Domains:	pkinase, TyrKc, S_TKc
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 (1) represents the longest transcript and encodes the longest isoform (1).