

## Product datasheet for **MC204260**

### Cdkn1b (NM\_009875) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cdkn1b (NM_009875) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cdkn1b
Synonyms:	AA408329; A1843786; Kip1; p27; p27Kip1
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC014296 CCACGCGTCCGTCCTTCCACCGCCATATTGGGCAACTAAAAAGAAGGGGGGCTCGTGCTTTTGGGGTGT TTTTTCCCCCTCATCCCTTGTCGCGACTCACTCGCGGCTCCGAGACTCGCGCGGGCAAGGTTTGGAG AGGGGCTGCGTTTCGCGGACACACGGGCTCGCCCCAGCCTACGCTCCGACTGTTTGCCACCTCCTCTGC CTCCTCCCTCCCTTCCCGCCCTCCAGTACACTTGATCACTGAAGCCTCGAGCTGCGCGCGGGTGGGG TGTCCCTGCGCTCTTCCCCAGACCTGCGCGTACTGCGGCTCGGGCGGTGCTCGCCTGGCTGCT CCATTTGACTGTGTGTGCACTGCAGAACTTGAAGAGGGTTTTGCGCTCCATCCGTGGCGTTTCGCT TTTGTTCGGTTTTGTTGTTTATTTCATTTTTTTTTTTCCGGAGAGAGGCGAGGCGGTGGTCCACACCCGC CCGAGGAGGAAGATGTCAAACGTGAGAGTGTCTAACGGGAGCCCGAGCCTGGAGCGGATGGACGCCAGAC AAGCGGATCACCCAAGCCTTCCGCTGCAGAAATCTCTTCGGCCGGTCAATCATGAAGAACTAACCCG GGACTTGGAGAAGCACTGCCGGATATGGAAGAAGCGAGTCAGCGCAAGTGAATTTGACTTTTCAGAAAT CATAAGCCCTGGAGGGCAGATACGAATGCGAGGAGTGGAGAGGGGAGCCTTGCCCGAGTTCTACTACA GGCCCCCGCGCCCCCAAGAGCGCTGCAAGGTGCTGGCGCAGGAGAGCCAGGATGTCAGCGGGAGCCG CCAGGCGGTGCCTTAATTGGGTCTCAGGCAAACCTGAGGACCGGCAATTTGGTGGACCAAATGCCTGAC TCGTGAGCAATCAGGCTGGGTTAGCGGAGCAGTGTCCAGGATGAGGAAGCGACCTGCTGCAGAAGATT CTTCTTCGCAAAACAAAAGGGCCAACAGAACAGAAAGAAATGTTTCAGACGGTTCCCCGAACGCTGGCAC TGTGGAGCAGACGCCAAGAAGCCCGCCTTCGACGCCAGACGTAACAGCTCCGAATTAAGAATATTTTC CTTGTTTATTAGATACATCACTGCTTTATGAAGCAAGGAAGATATACATGAAAAAAAAAAAAAAAAAAAA AA A
Restriction Sites:	RsrII-NotI
ACCN:	NM_009875
Insert Size:	594 bp



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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:** [BC014296](#), [AAH14296](#)

**RefSeq Size:** 1261 bp

**RefSeq ORF:** 594 bp

**Locus ID:** 12576

**UniProt ID:** [P46414](#)

**Cytogenetics:** 6 65.77 cM

**Gene Summary:** Important regulator of cell cycle progression (PubMed:8033213, PubMed:12972555). Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (By similarity). Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2 complexes (PubMed:8033213). Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of CCND1-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its phosphorylation state and/or stoichiometry.[UniProtKB/Swiss-Prot Function]