

Product datasheet for MR201957

Cdkn1b (NM_009875) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdkn1b (NM_009875) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cdkn1b
Synonyms:	AA408329; AI843786; Kip1; p27; p27Kip1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR201957 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTCAAACGTGAGAGTGTCTAACGGGAGCCCGAGCCTGGAGCGGATGGACGCCAGACAAGCGGATCACC
 CCAAGCCTTCGCTGCAGAAATCTCTCGGCCCGGTCAATCATGAAGAACTAACCCGGGACTTGGAGAA
 GCACTGCCGGGATATGGAAGAAGCGAGTCAGCGCAAGTGAATTCGACTTTCAGAATCATAAGCCCCTG
 GAGGGCAGATACGAATGGCAGGAGGTGGAGAGGGGCGAGCTTGCCCGAGTTCTACTACAGGCCCCCGGCC
 CCCCCAAGAGCGCCTGCAAGGTGCTGGCGCAGGAGAGCCAGGATGTCAGCGGGAGCCGCCAGGCGGTGCC
 TTTAATTGGGTCTCAGGCAAACTCTGAGGACCGGCATTTGGTGGACCAAAATGCCTGACTCGTCAGACAAT
 CAGGCTGGGTTAGCGGAGCAGTGTCCAGGGATGAGGAAGCGACCTGCTGCAGAAGATTCTTCTTCGCAAA
 ACAAAAGGGCCAACAGAACAGAGAAAATGTTTCAGACGGTTCGCCGAACGCTGGCACTGTGGAGCAGAC
 GCCCAAGAAGCCCGGCCTTCGACGCCAGACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>MR201957 protein sequence Red=Cloning site Green=Tags(s)
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MSNVRVSNGPSLERMDARQADHPKPSACRNLFPGVNHEELTRDLEKHCRDMEEASQRKWNFDFQNHKPL
 EGRYEWQEVERGSLPEFYRPPRPPKSACKVLAQESQDVSGSRQAVPLIGSQANSEDRHLVDQMPDSSDN
 QAGLAEQCPGMRKRPAAEDSSSQNKANRTEENVSDGSPNAGTVEQTPKKPGLRRQT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV


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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009875

ORF Size: 591 bp

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 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_009875.1](#)

RefSeq Size: 2405 bp

RefSeq ORF: 594 bp

Locus ID: 12576

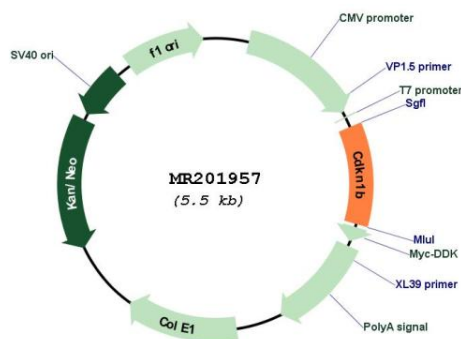
UniProt ID: [P46414](#)

Cytogenetics: 6 65.77 cM

MW: 22.2 kDa

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]

Product images:



Circular map for MR201957