

Product datasheet for **MG201957**

Cdkn1b (NM_009875) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cdkn1b (NM_009875) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Cdkn1b
Synonyms: AA408329; AI843786; Kip1; p27; p27Kip1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201957 representing NM_009875
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCAAACGTGAGAGTGTCTAACGGGAGCCCGAGCCTGGAGCGGATGGACGCCAGACAAGCGGATCACC
 CCAAGCCTCCGCCTGCAGAAATCTCTTCGGCCCGGTCAATCATGAAGAACTAACCCGGGACTTGGAGAA
 GCACTGCCGGGATATGGAAGAAGCGAGTCAGCGCAAGTGAATTCGACTTTCAGAATCATAAGCCCTG
 GAGGGCAGATACGAATGGCAGGAGGTGGAGAGGGGCAGCTTGCCCGAGTTCTACTACAGGCCCGCGCC
 CCCCCAAGAGCGCTGCAAGGTGCTGGCGCAGGAGAGCCAGGATGTCAGCGGGAGCCCGCAGGCGGTGCC
 TTTAATTGGGTCTCAGGCAAACTCTGAGGACCGGCATTTGGTGGACCAAATGCCTGACTCGTCAGACAAT
 CAGGCTGGGTTAGCGGAGCAGTGTCCAGGGATGAGGAAGCGACCTGCTGCAGAAGATTCTTCTTCGCAAA
 ACAAAAAGGGCCAACAGAACAGAGAAAATGTTTCAGACGGTTCGCCGAACGCTGGCACTGTGGAGCAGAC
 GCCCAAGAAGCCCGCCTTCGACGCCAGACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201957 representing NM_009875
 Red=Cloning site Green=Tags(s)

MSNVRVSNGPSLERMDARQADHPKPSACRNLFQPNVHEELTRDLEKHCRDMEEASQRKWNFDQNHKPL
 EGRYEWQEVERGSLPEFYRPPRPPKSACKVLAQESQDVSGSRQAVPLIGSQANSEDRHLVDQMPDSSDN
 QAGLAEQCPGMRKRPAAEDSSSQNKRANRTEENVSDGSPNAGTVEQTPKKPGLRRQT

TRTRPLE - GFP Tag - V

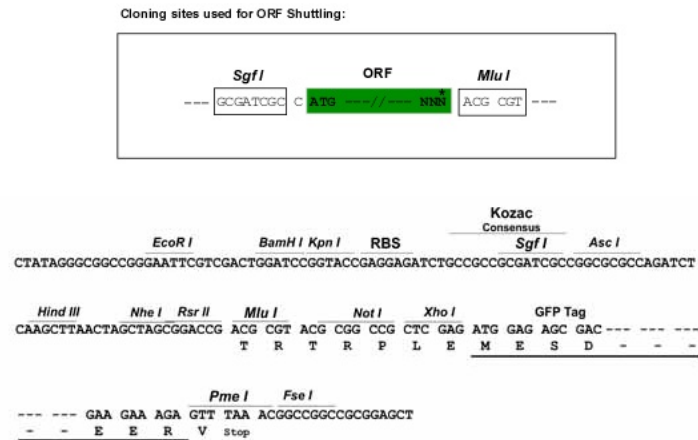
Chromatograms: https://cdn.origene.com/chromatograms/ja2360_b02.zip



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Restriction Sites: Sgfl-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.

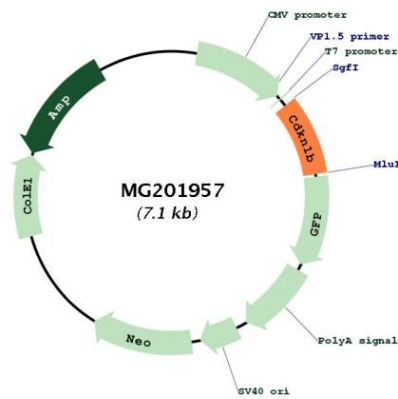
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

RefSeq: [NM_009875.1](#)
RefSeq Size: 3084 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]

Product images:



Circular map for MG201957