

## Product datasheet for **MG227284**

### **Cdkn2a (NM\_001040654) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cdkn2a (NM\_001040654) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Cdkn2a  
**Synonyms:** Arf; ARF-INK4a; INK4a-ARF; Ink4a/Arf; MTS1; p16; p16(INK4a); p16INK4a; p19 p19ARF; Pctr1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG227284 representing NM\_001040654  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGTCCGCTGCAGACAGACTGGCCAGGGCGGCCAGGGCCGTGTGCATGACGTGCGGGCACTGC  
TGGAAAGCCGGGTTTCGCCAACGCCCGAACTCTTCGGTCGTACCCCGATTACAGGTGATGATGATGGG  
CAACGTTACGTAGCAGCTCTTCTGCTCAACTACGGTGCAGATTCGAACTGCGAGGACCCACTACCTTC  
TCCCGCCCGGTGCAGCAGCAGCGCGGGAAGGCTTCTGGACACGCTGGTGGTGTGCACGGGTACGGGG  
CTCGGCTGGATGTGCGCGATGCCTGGGGTCGCCTGCCGCTCGACTGGCCCAAGAGCGGGGACATCAAGA  
CATCGTGCATATTTGCGTTCGGTGGGTGCTCTTTGTGTTCCGCTGGGTGGTCTTTGTGTACCGCTGGG  
AACGTCGCCAGACCGGACATAGCTTCAGCTCAAGCACGCCAGGGCCCTGGAACCTCGCGGCAAT  
CCAAGAGCAGAGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG227284 representing NM\_001040654  
**Red=Cloning site Green=Tags(s)**

MESAADRLARAAAQGRVHDVRLLEAGVSPNAPNSFGRTPIQVMMGNVHVAALLLNYGADSNCEDPTTF  
SRPVHDAAREGFLDTLVVLHGSGARLDVRDAWGRLPLDLAQERGHQDIVRYLRSAGCSLCSAGWSLCTAG  
NVAQTDGHSFSSSTPRALELRGQSSEQS

**TRTRPLE** - GFP Tag - V

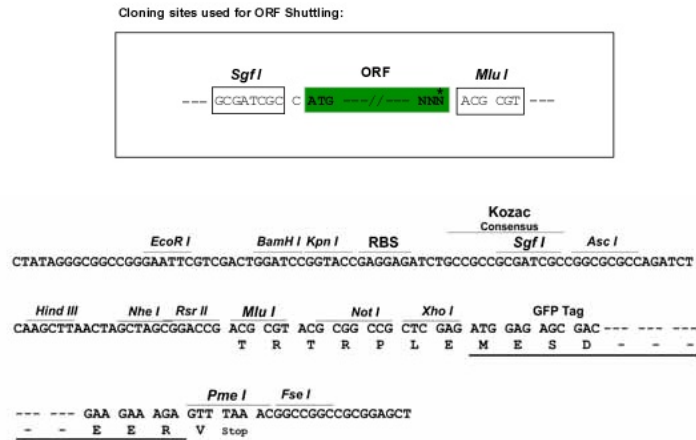
**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1856\\_a07.zip](https://cdn.origene.com/chromatograms/ja1856_a07.zip)



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001040654

ORF Size: 504 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](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](#)

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\\_001040654.1](#), [NP\\_001035744.1](#)

**RefSeq Size:** 850 bp

**RefSeq ORF:** 507 bp

**Locus ID:** 12578

**UniProt ID:** [P51480](#)

**Cytogenetics:** 4 42.15 cM

**Gene Summary:** Acts as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG227284