

Product datasheet for MR227284

Cdkn2a (NM_001040654) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cdkn2a (NM_001040654) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cdkn2a
Synonyms: Arf; ARF-INK4a; INK4a-ARF; Ink4a/Arf; MTS1; p16; p16(INK4a); p16INK4a; p19 p19ARF; Pctr1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR227284 representing NM_001040654
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGAGTCCGCTGCAGACAGACTGGCCAGGGCGGCCAGGGCCGTGTGCATGACGTGCGGGCACTGC
 TGGGAAGCCGGGTTTCGCCAACGCCCGAACTTTTCGGTCGTACCCCGATTACAGTGATGATGATGGG
 CAACGTTACGTAGCAGCTTTCTGCTCAACTACGGTGCAGATTCGAATGCGAGGACCCCACTACCTTC
 TCCCGCCCGGTGCAGCAGCGCGGGAAGGCTTCTGGACACGCTGGTGGTGTGCACGGGTGAGGGG
 CTCGGCTGGATGTGCGCATGCCTGGGGTGCCTGCCGCTCGACTGGCCCAAGAGCGGGGACATCAAGA
 CATCGTGCATATTTGCGTTCGGTGGGTGCTCTTTGTGTTCCGCTGGGTGGTCTTTGTGTACCGCTGGG
 AACGTCGCCAGACCAGCGGCATAGCTTCAGCTCAAGCACGCCAGGGCCCTGGAATTCGCGGCCAAT
 CCAAGAGCAGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227284 representing NM_001040654
 Red=Cloning site Green=Tags(s)

MESAADRLARAAAQGRVHDVRLLEAGVSPNAPNSFGRTPIQVMMGNVHVAALLLNYGADSNCEDPTTF
 SRPVHDAAREGFLDTLVVHLHGSGARLDVRDAWGRLPLDLAQERGHQDIVRYLRSAGCSLCSAGWSLCTAG
 NVAQTDGHSFSSSTPRALELRGQSQEQS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

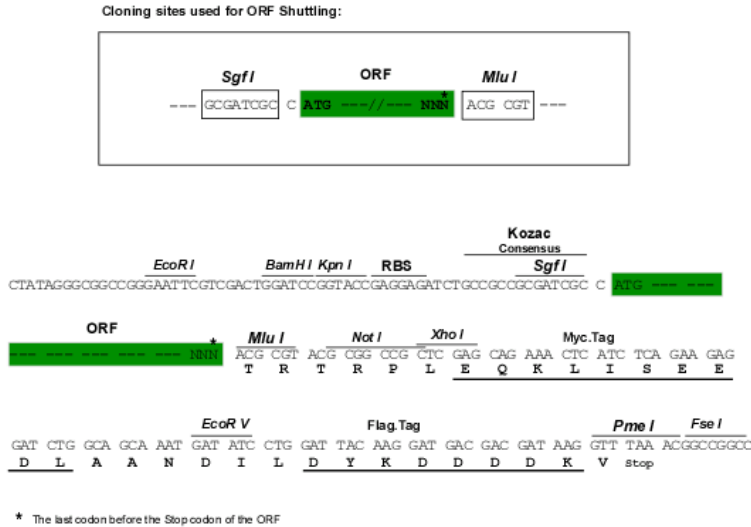
Chromatograms: https://cdn.origene.com/chromatograms/ja1296_c09.zip



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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 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](#)

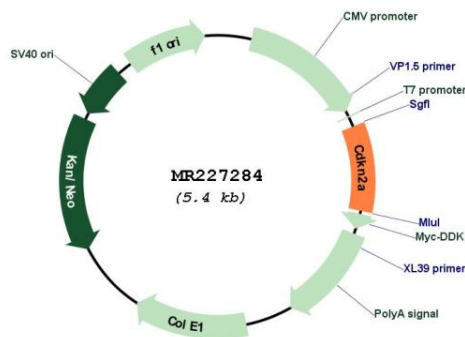
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

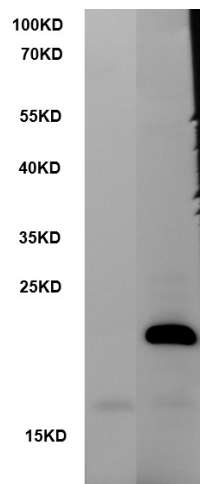
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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
MW: 18.4 kDa
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 MR227284



Western blot validation of overexpression lysate using an anti-CDKN2A antibody (Cat# [TA809937]). Left: Cell lysates from HEK293T cells transfected with the PCMV6-Entry Vector with no insert (Cat# [PS100001]); Right: Cell lysates from HEK293T cells transfected with MR227284