

## Product datasheet for **RC213080**

### CDKN3 (NM\_005192) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: CDKN3 (NM\_005192) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: CDKN3  
 Synonyms: CDI1; CIP2; KAP; KAP1  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC213080 representing NM\_005192  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAGCCGCCAGTTCAATACAAACAAGTGAGTTTGACTCATCAGATGAAGAGCCTATTGAAGATGAAC  
 AGACTCCAATTCATATATCATGGCTATCTTTGTCACGAGTGAATTGTTCTCAGTTTCTCGGTTTATGTGC  
 TCTTCCAGTTGTAATTTAAAGATGTTAGAAGAAATGTCCAAAAGATACAGAAGAACTAAAGAGCTGT  
 GGTATACAAGACATATTTGTTTTCTGCACCAGAGGGGAAGTGTCAAATATAGAGTCCCAAACCTTCTGG  
 ATCTCTACCAGCAATGTGGAATTATCACCCATCATCATCAATCGCAGATGGAGGGACTCCTGACATAGC  
 CAGCTGCTGTGAAATAATGGAAGAGCTTACAACCTGCCTTAAAAATTACCGAAAAACCTTAATACACTGC  
 TATGGAGGACTTGGGAGATCTTGTCTTGTAGCTGCTTGTCTCCTACTATACCTGTCTGACACAATATCAC  
 CAGAGCAAGCCATAGACAGCCTGCGAGACCTAAGAGGATCCGGGGCAATACAGACCATCAAGCAATACAA  
 TTATCTTCATGAGTTTCGGGACAAATTAGCTGCACATCTATCAAGAGATTCACAATCAAGATCTGTA  
 TCAAGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC213080 representing NM\_005192  
Red=Cloning site Green=Tags(s)

MKPPSSIQTSEFDSSDEEPIEDEQTPIHISWLSLSRVNCSQFLGLCALPGCKFKDVRNVQKDTEELKSC  
 GIQDIFVFCTRGELSKYRVPNLLDL YQQCGIITHHHPIADGGTPDIASCCEIMEELTTCLKNYRKTLIHC  
 YGGLGRSCLVAACLLLYLSDTISPEQAIDSLRDLRGSQAIQTIKQYNYLHEFRDKLAAHLSSRDSQSRSV  
 SR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6489\\_f07.zip](https://cdn.origene.com/chromatograms/mk6489_f07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005192

**ORF Size:** 636 bp

**OTI Disclaimer:** 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\\_005192.4](#)

**RefSeq Size:** 836 bp

**RefSeq ORF:** 639 bp

**Locus ID:** 1033

**UniProt ID:** [Q16667](#)

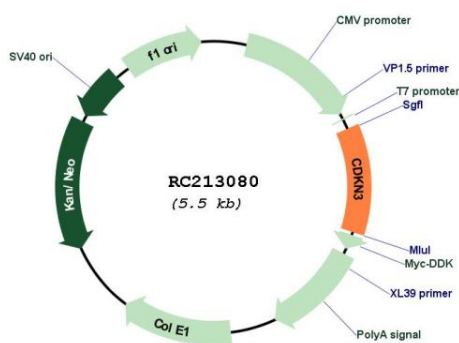
**Cytogenetics:** 14q22.2

**Protein Families:** Druggable Genome, Phosphatase

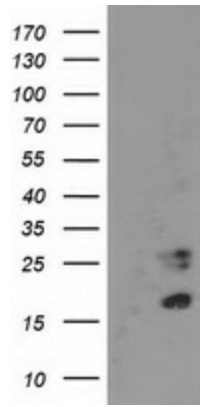
**MW:** 23.6 kDa

**Gene Summary:** The protein encoded by this gene belongs to the dual specificity protein phosphatase family. It was identified as a cyclin-dependent kinase inhibitor, and has been shown to interact with, and dephosphorylate CDK2 kinase, thus prevent the activation of CDK2 kinase. This gene was reported to be deleted, mutated, or overexpressed in several kinds of cancers. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2008]

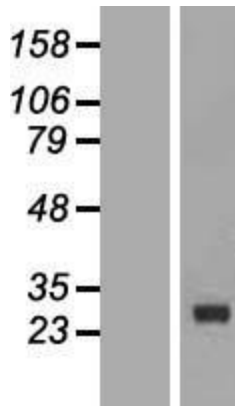
## Product images:



Circular map for RC213080



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CDKN3 (Cat# RC213080, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CDKN3(Cat# [TA503580]). Positive lysates [LY417450] (100ug) and [LC417450] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417450]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213080 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).