

## Product datasheet for **RC214412**

### **p18 INK4c (CDKN2C) (NM\_078626) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** p18 INK4c (CDKN2C) (NM\_078626) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** p18 INK4c  
**Synonyms:** INK4C; p18; p18-INK4C  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC214412 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGAGCCTTGGGGAACGAGTTGGCGTCCGACGCTGCCAGGGGGACCTAGAGCAACTTACTAGTT  
TGTTGCAAATAATGTAAACGTCAATGCACAAATGGATTTGGAAGGACTGCGCTGCAGTTATGAACT  
TGGAAATCCCAGATTGCCAGGAGACTGCTACTTAGAGGTGCTAATCCCGATTTGAAAGACCGAAGTGGT  
TTCGCTGCATTCATGATGCGCCAGAGCAGGTTTCTGGACACTTTACAGACTTTGCTGGAGTTTCAAG  
CTGATGTTAACATCGAGGATAATGAAGGGAACCTGCCCTTGCACTTGGCTGCCAAAGAAGGCCACCTCCG  
GGTGGTGGAGTTCTGGTGAAGCACACGCCAGCAATGTGGGCATCGGAACCATAAGGGGGACACCGCC  
TGTGATTTGCCAGGCTCTATGGGAGGAATGAGGTTGTTAGCCTGATGCAGGCAAACGGGCTGGGGAG  
CCACAAATCTTCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC214412 protein sequence  
Red=Cloning site Green=Tags(s)

MAEPWGNELASAAARGDLEQLTSLQNNVNVNAQNGFGRALQVMKLGNPEIARRLLLRGANPDLKDRTG  
FAVIHDAARAGFLDTLQTLLEFQADVNIEDNEGNLPLHLAAKEGHLRVVEFLVKHTASNVGHRNHKGDTA  
CDLARLYGRNEVVSMLMQANGAGGATNLQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

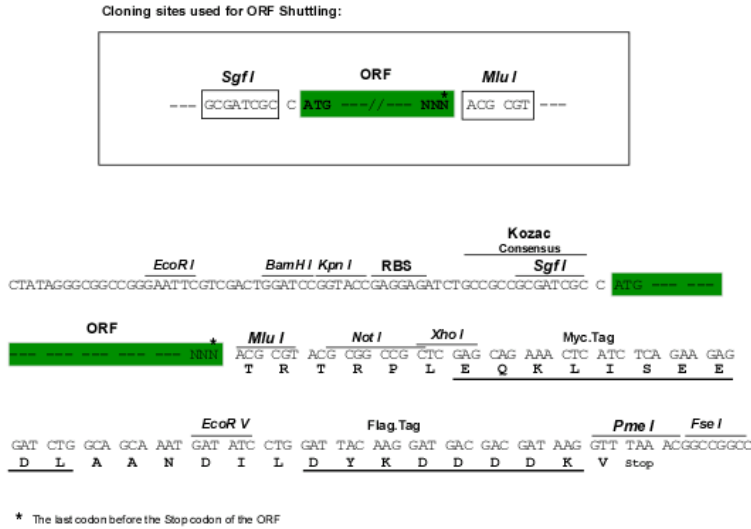
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6233\\_b10.zip](https://cdn.origene.com/chromatograms/mk6233_b10.zip)



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_078626

ORF Size: 504 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.

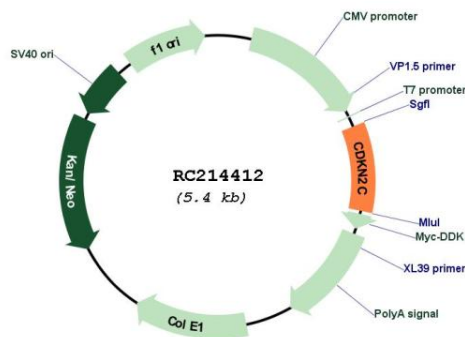
RefSeq: [NM\\_078626.3](#)

RefSeq Size: 1273 bp

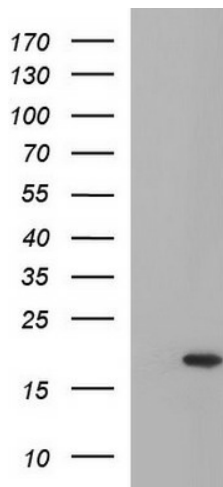
RefSeq ORF: 507 bp

Locus ID:	1031
UniProt ID:	<a href="#">P42773</a>
Cytogenetics:	1p32.3
Protein Families:	Druggable Genome
Protein Pathways:	Cell cycle
MW:	18.1 kDa
Gene Summary:	The protein encoded by this gene is a member of the INK4 family of cyclin-dependent kinase inhibitors. This protein has been shown to interact with CDK4 or CDK6, and prevent the activation of the CDK kinases, thus function as a cell growth regulator that controls cell cycle G1 progression. Ectopic expression of this gene was shown to suppress the growth of human cells in a manner that appears to correlate with the presence of a wild-type RB1 function. Studies in the knockout mice suggested the roles of this gene in regulating spermatogenesis, as well as in suppressing tumorigenesis. Two alternatively spliced transcript variants of this gene, which encode an identical protein, have been reported. [provided by RefSeq, Jul 2008]

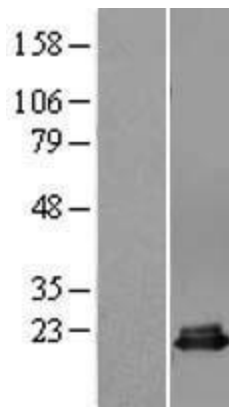
**Product images:**



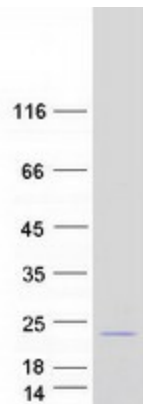
Circular map for RC214412



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CDKN2C (Cat# RC214412, 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-CDKN2(Cat# [TA590417]). Positive lysates [LY429933] (100ug) and [LC429933] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY409196]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214412 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDKN2C protein (Cat# [TP314412]). The protein was produced from HEK293T cells transfected with CDKN2C cDNA clone (Cat# RC214412) using MegaTran 2.0 (Cat# [TT210002]).