

## Product datasheet for **RC214065**

### **p19 INK4d (CDKN2D) (NM\_001800) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** p19 INK4d (CDKN2D) (NM\_001800) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** p19 INK4d  
**Synonyms:** INK4D; p19; p19-INK4D  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC214065 representing NM\_001800  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGCTGGAGGAGTTTCGCGCCGGCACC GGCTGAGTGGGGCGCGGCCCGGGCGACGTGCAGGAGG  
TGCGCCGCTTCTGCACCGCAGCTGGTGCATCCCGACGCCCTCAACCGCTTCGGCAAGACGGCGCTGCA  
GGTCATGATGTTGGCAGCACCGCCATCGCCCTGGAGTCTGCTGAAGCAAGGTGCCAGCCCAATGTCCAG  
GACACCTCCGGTACCAGTCCAGTCCATGACGCAGCCCGCACTGGATTCTGGACACCTGAAGGTCTAG  
TGGAGCACGGGGCTGATGTCAACGTGCCTGATGGCACC GGCCACTTCCAATCCATCTGGCAGTTCAAGA  
GGGTACACTGCTGTGGTCAGCTTCTGGCAGCTGAATCTGATCTCCATCGCAGGACGCCAGGGGTCTC  
ACACCCTTGGAGCTGGCACTGCAGAGAGGGCTCAGGACCTCGTGGACATCTGCAGGGCCACATGGTGG  
CCCCGCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC214065 representing NM\_001800  
Red=Cloning site Green=Tags(s)

MLLEEVRAGDRLSGAAARGDVQEVRRLLHRELVHPDALNRFGKTALQVMMFGSTAI ALELLKQGASPNVQ  
DTSGETSPVHDAARTGFLDTLKVLEHGADVNPDPGTGALPIHLAVQEHTAVV SFLAAESDLHRRDARGL  
TPLELALQRGAQDLVDIILQGHMVAPL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6036\\_a11.zip](https://cdn.origene.com/chromatograms/mk6036_a11.zip)



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001800

ORF Size: 498 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.

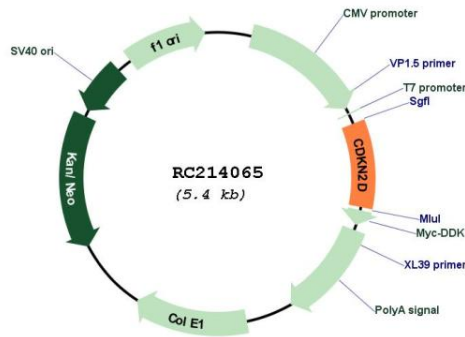
RefSeq: [NM\\_001800.3](#), [NP\\_001791.1](#)

RefSeq Size: 1416 bp

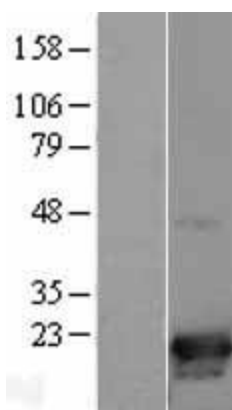
RefSeq ORF: 501 bp

<b>Locus ID:</b>	1032
<b>UniProt ID:</b>	<a href="#">P55273</a>
<b>Cytogenetics:</b>	19p13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Cell cycle
<b>MW:</b>	17.5 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a member of the INK4 family of cyclin-dependent kinase inhibitors. This protein has been shown to form a stable complex 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. The abundance of the transcript of this gene was found to oscillate in a cell-cycle dependent manner with the lowest expression at mid G1 and a maximal expression during S phase. The negative regulation of the cell cycle involved in this protein was shown to participate in repressing neuronal proliferation, as well as spermatogenesis. Two alternatively spliced variants of this gene, which encode an identical protein, have been reported. [provided by RefSeq, Jul 2008]

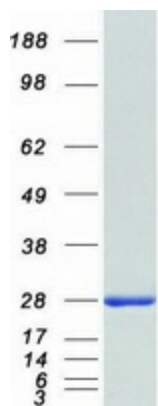
**Product images:**



Circular map for RC214065



Western blot validation of overexpression lysate (Cat# [LY400682]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214065 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDKN2D protein (Cat# [TP314065]). The protein was produced from HEK293T cells transfected with CDKN2D cDNA clone (Cat# RC214065) using MegaTran 2.0 (Cat# [TT210002]).