

Product datasheet for RC214065

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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 >RC214065 representing NM_001800

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCTGCTGGAGGAGGTTCGCGCCGGCGACCGGCTGAGTGGGGCGGCCCGGGGCGACGTGCAGGAGG
TGCGCCGCCTTCTGCACCGCGAGCTGGTGCATCCCGACGCCCTCAACCGCTTCGGCAAGACGGCGCTGCA
GGTCATGATGTTTGGCAGCACCGCCATCGCCCTGGAGCTGCTGAAGCAAGGTGCCAGCCCCAATGTCCAG
GACACCTCCGGTACCAGTCCATGACGCAGCCCGCACTGGATTCCTGGACACCCTGAAGGTCCTAG
TGGAGCACGGGGCTGATGTCAACGTGCCTGATGGCACCGGGGCACTTCCAATCCATCTGGCAGTTCAAGA
GGGTCACACTGCTGTGGTCAGCTTTCTGGCAGCTGAATCTGATCTCCATCCGCAGGGACGCCAGGGGTCTC
ACACCCTTGGAGCTGGCACTGCAGAGAGGGGCTCAGGACCTCGTGGACATCCTGCAGGGCCACATGGTGG

CCCCGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214065 representing NM_001800

Red=Cloning site Green=Tags(s)

MLLEEVRAGDRLSGAAARGDVQEVRRLLHRELVHPDALNRFGKTALQVMMFGSTAIALELLKQGASPNVQ DTSGTSPVHDAARTGFLDTLKVLVEHGADVNVPDGTGALPIHLAVQEGHTAVVSFLAAESDLHRRDARGL

TPLELALQRGAQDLVDILQGHMVAPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6036 a11.zip





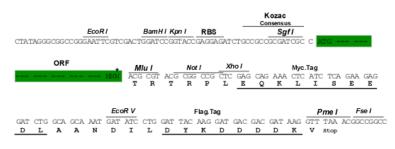
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:





^{*} The last codon before the Stop codon of the ORF

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.

RefSeq: <u>NM 001800.3</u>, <u>NP 001791.1</u>

RefSeq Size: 1416 bp
RefSeq ORF: 501 bp
Locus ID: 1032
UniProt ID: P55273



Cytogenetics: 19p13.2

Protein Families: Druggable Genome

Protein Pathways: Cell cycle

MW: 17.5 kDa

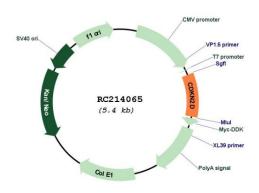
Gene Summary: The protein encoded by this gene is a member of the INK4 family of cyclin-dependent kinase

inhibitors. This protein has been shown to 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

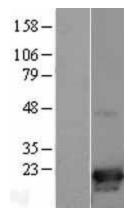
spermatogenesis. Two alternatively spliced variants of this gene, which encode an identical

protein, have been reported. [provided by RefSeq, Jul 2008]

Product images:

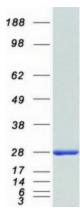


Circular map for RC214065



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]).