

## Product datasheet for RC402693

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## p27 KIP 1 (CDKN1B) (NM\_004064) Human Mutant ORF Clone

### **Product data:**

**Product Type:** Mutant ORF Clones

Product Name: p27 KIP 1 (CDKN1B) (NM\_004064) Human Mutant ORF Clone

Mutation Description: 11197
Affected Codon#: 119
Affected NT#: 356

Nucleotide Mutation: CDKN1B Mutant (I119T), Myc-DDK-tagged ORF clone of Homo sapiens cyclin-dependent kinase

inhibitor 1B (p27, Kip1) (CDKN1B) as transfection-ready DNA

**Effect:** Myeloproliferative syndrome

**Symbol:** p27 KIP 1

Synonyms: CDKN4; KIP1; MEN1B; MEN4; P27KIP1

E. coli Selection: Kanamycin (25 ug/mL)

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-Entry (PS100001)

Tag: Myc-DDK
ACCN: NM 004064

ORF Size: 594 bp
Restriction Sites: Sgfl-Mlul



**ORF Nucleotide** Sequence:

>RC402693 representing NM\_004064

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC

CCAAGCCCTCGGCCTGCAGGAACCTCTTCGGCCCGGTGGACCACGAAGAGTTAACCCGGGACTTGGAGAA GCACTGCAGAGACATGGAAGAGGCGAGCCAGCGCAAGTGGAATTTCGATTTTCAGAATCACAAACCCCTA GAGGGCAAGTACGAGTGGCAAGAGGTGGAGAAGGGCAGCTTGCCCGAGTTCTACTACAGACCCCCGCGGC TTTAACTGGGGCTCCGGCTAACTCTGAGGACACGCATTTGGTGGACCCAAAGACTGATCCGTCGGACAGC CAGACGGGGTTAGCGGAGCAATGCGCAGGAATAAGGAAGCGACCTGCAACCGACGATTCTTCTACTCAAA ACAAAAGAGCCAACAGAACAGAAGAAAATGTTTCAGACGGTTCCCCAAATGCCGGTTCTGTGGAGCAGAC GCCCAAGAAGCCTGGCCTCAGAAGACGTCAAACG

**AGCGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGATCTGGCAGCAAATGATATCC TGGATTACAAGGATGACGACGA TAAGGTTTAA

**Protein Sequence:** 

>RC402693 representing NM\_004064 Red=Cloning site Green=Tags(s)

MSNVRVSNGSPSLERMDARQAEHPKPSACRNLFGPVDHEELTRDLEKHCRDMEEASQRKWNFDFQNHKPL EGKYEWQEVEKGSLPEFYYRPPRPKGACKVPAQESQDVSGSRPAAPLTGAPANSEDTHLVDPKTDPSDS QTGLAEQCAGIRKRPATDDSSTQNKRANRTEENVSDGSPNAGSVEQTPKKPGLRRRQT

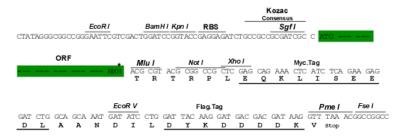
**SGPTRTRRL**EQKLISEEDLAANDILDYKDDDDK**V** 

**Restriction Sites:** 

Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF



#### p27 KIP 1 (CDKN1B) (NM\_004064) Human Mutant ORF Clone - RC402693

**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).

RefSeg: NP 004055

RefSeq Size: 594 bp
RefSeq ORF: 597 bp
Locus ID: 1027
Cytogenetics: 12p13.1

Domains: CDI

**Protein Families:** Druggable Genome

Protein Pathways: Cell cycle, Chronic myeloid leukemia, ErbB signaling pathway, Pathways in cancer, Prostate

cancer, Small cell lung cancer

**MW:** 21.8 kDa

**Gene Summary:** This gene encodes a cyclin-dependent kinase inhibitor, which shares a limited similarity with

CDK inhibitor CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from

quiescence to the proliferative state. Mutations in this gene are associated with multiple

endocrine neoplasia type IV (MEN4). [provided by RefSeq, Apr 2014]