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Product datasheet for RC402691

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:	W76X
Affected Codon#:	76
Affected NT#:	227
Nucleotide Mutation:	CDKN1B Mutant (W76X), Myc-DDK-tagged ORF clone of Homo sapiens cyclin-dependent kinase inhibitor 1B (p27, Kip1) (CDKN1B) as transfection-ready DNA
Effect:	Pituitary and parathyroid tumours
Symbol:	p27 KIP 1
Synonyms:	CDKN4; KIP1; MEN1B; MEN4; P27KIP1
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_004064
ORF Size:	225 bp
Restriction Sites:	SgfI-MluI

ORF Nucleotide Sequence:

>RC402691 representing NM_004064
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCAAACGTGCGAGTGTCTAACGGGAGCCCTAGCCTGGAGCGGATGGACGCCAGGCAGGCGGAGCACC
CCAAGCCCTCGGCCTGCAGGAACCTCTTCGGCCCGGTGGACCACGAAGAGTTAACCCGGGACTTGGAGAA
GCACTGCAGAGACATGGAAGAGGCGAGCCAGCGCAAGTGGAATTTCGATTTTCAGAATCACAAACCCCTA
GAGGGCAAGTACGAG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGA TAAGGTTTAA

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Protein Sequence:

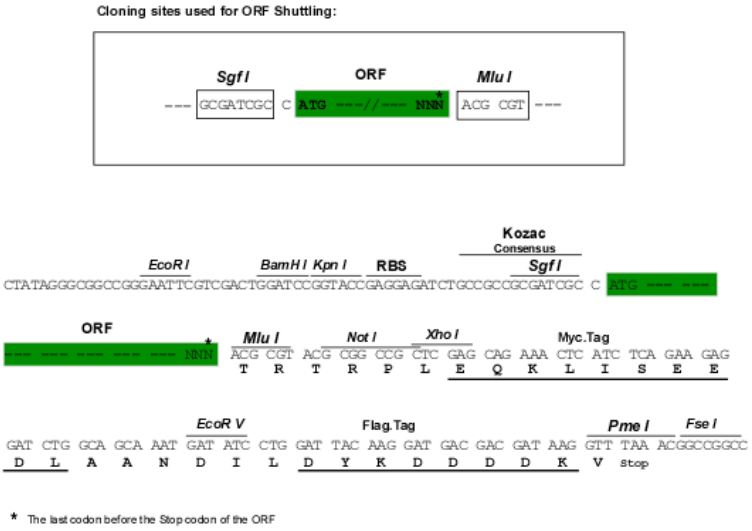
>RC402691 representing NM_004064
Red=Cloning site Green=Tags(s)

MSNVRVSNGSPSLERMDARQAEHPKPSACRNLFGPVDHEELTRDLEKHCRDMEEASQRKWNFDFQNHKPL
EGKYE

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NP_004055

RefSeq Size:	225 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:	8.3 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]