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Product datasheet for RC204658

CDKN2AIP (NM_017632) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDKN2AIP (NM_017632) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CDKN2AIP
Synonyms:	CARF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204658 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCAGGAGGTGTCGGAGTACCTGAGCCAGAACCCGCGGGTGGCAGCCTGGGTGGAGGCGCTGCGCT
GCGACGGCGAGACTGACAAACACTGGCGCCACCGCCGGGATTTTTTGCTTCGCAACGCCGGGGACCTGGC
CCCCGCTGGCGGCGCTGCCTCCGCTAGCACGGATGAAGCTGCCGACGCCGAGAGCGGGACCCGAAACCGG
CAGCTGCAGCAGCTCATCTCCTTTTCCATGGCCTGGGCGAACCACGTCTTCCTCGGGTGCCGATACCCTC
AAAAAGTTATGGATAAAATACTTAGTATGGCTGAAGGCATCAAAGTGACAGATGCTCCAACCTATACAAC
AAGAGATGAACTGGTTGCCAAGGTGAAGAAAAGAGGGATATCGAGTAGCAATGAAGGGGTAGAAGAGCCA
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AGACAGAACGTGCATCAGCTCAGCAGGAAAACAGTTCAACGTGTATAGGGTCGGCCATCAAATCAGAGAG
TGGGAACTCAGCTCGGAGCTCTGGCATCTCCAGTCAGAATAGCTCTACAAGTGATGGAGATCGATCTGTT
TCCAGCCAAAGCAGCAGCAGCGTTTCCTCTCAGGTAACAACGGCAGGATCTGGGAAAGCTTCTGAAGCAG
AAGCTCCAGATAAACACGGTTCATCATTTGTTTCCTTGCTGAAATCCAGTGTGAATAGTCACATGACCCA
ATCCACTGATTCTAGACAACAAAGTGGATCACCTAAAAAGAGTGCTTTGGAAGGCTCTTCAGCCTCAGCT
TCTCAAAGCAGCTCAGAGATCGAGGTGCCCTTGTTGGGCTCCTCAGGAAGCTCAGAGGTAGAATTGCCAC
TATTGTCTTCCAAACCTAGTTCAGAGACAGCTTCAAGTGGGTTAACTTCCAAAACTAGTTCAGAGGCAAG
TGTTTCATCATCAGTTGCTAAAAACAGTTCCTCATCAGGCACATCCTTACTGACTCCCAAGAGCAGCTCT
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GCAGCTCCCAGACCAGTGGATCTCTGGTTTCCAAAAGCACTTCCTTAGCAAGTGTGTCCCAGTTGGCTTC
TAAGAGTAGTTCTCAGACTAGCACCTCACAGTTGCCTTCTAAAAGTACTTCACAGTCAAGTGAGAGTTCT
GTCAAATTCTCTTGCAAGTTAACCAATGAAGATGTGAAACAGAAGCAACCTTTTTTCAATAGACTATATA
AAACGGTGGCATGGAAGTTGGTAGCTGTTGGTGGCTTTAGTCCCAATGTGAATCATGGAGAGCTCCTAAA
TGCAGCTATTGAGGCTCTGAAAGCAACACTGGATGTATTTTTTGTCCCACTAAAAGAATTGGCAGATCTG
CCTCAAAATAAGAGCTCTCAAGAAAGTATTGTTTGTGAATTGAGGTGCAAGTCTGTGTATTTGGGCACTG
GCTGTGGAAAAAGCAAAGAAAATGCAAAAGCAGTTGCATCAAGAGAAGCATTGAAGTTATTTCTCAAGAA
AAAGGTGGTGGTAAAAATATGTAAAAGGAAATACAGAGGCAGTGAAATAGAAGATCTAGTACTCCTTGAT
GAAGAATCGAGGCCTGTAAACTTACCTCCAGCACTAAAACATCCTCAAGAATTACTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204658 protein sequence
Red=Cloning site Green=Tags(s)

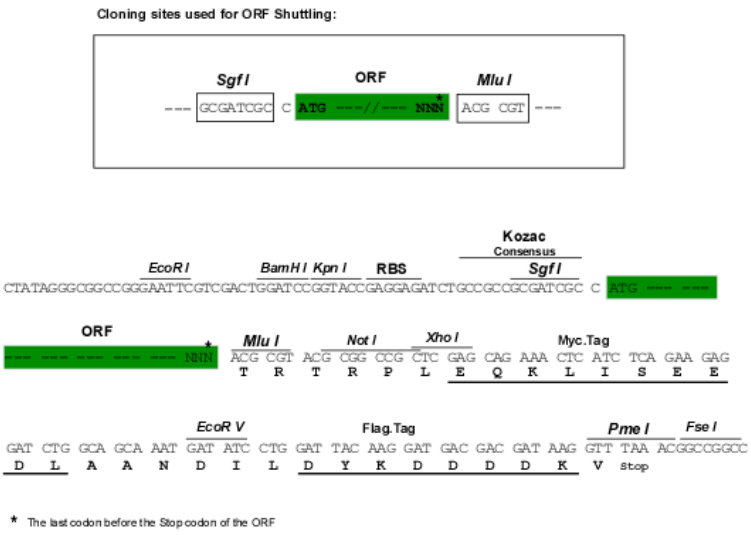
MAQEVSEYLSQNPRVAAWVEALRCDGETDKHWRHRRDFLLRNAGDLAPAGGAASASTDEAADAESGTRNR
QLQQLISFSMAWANHVFLGCRYPQKVMDKILSMAEGIKVTDAPTYTTRDELVAKVKKRGISSSNEGVEEP
SKKRVIEGKNSSAVEQDHAKTSAKTERASAQQENSSTCIGSAIKSESGNSARSSGISSQNSSTSDGDRSV
SSQSSSSVSSQVTTAGSGKASEAEAPDKHGSSFVSLLKSSVNSHMTQSTDSRQQSGSPKKSALEGSSASA
SQSSSEIEVPLLGSSGSSEVELPLLSSKPSSETASSGLTSKTSSEASVSSSVAKNSSSSGTSLLTPKSSS
STNTSLLTSKSTSQVAASLLASKSSSQTSGSLVSKSTSLASVSQLASKSSSQTSTSQLPSKSTSQSSESS
VKFSCKLTNEDVKQKQPFFNRLYKTVAWKLVAVGGFSPNVNHGELLNAAIEALKATLDVFFVPLKELADL
PQNKSSQESIVCELRCKSVYLGTGCGKSKENAKAVASREALKLFLKKKVVVKICKRKYRGSEIEDLVLLD
EESRPVNLPPALKHPQELL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6068_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017632

ORF Size: 1737 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_017632.4

RefSeq Size: 2391 bp

RefSeq ORF: 1743 bp

Locus ID: 55602

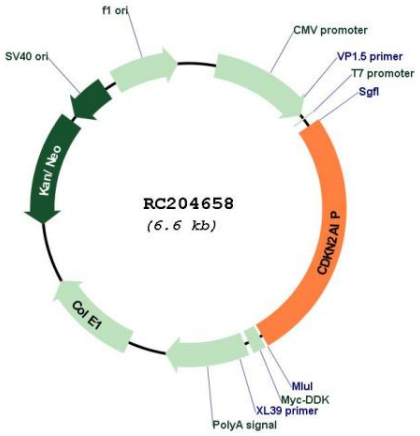
UniProt ID: Q9NXV6

Cytogenetics: 4q35.1

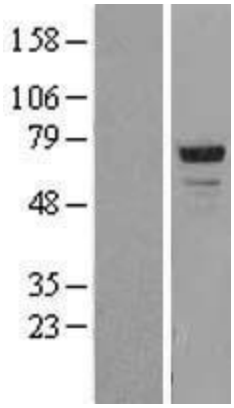
MW: 61.1 kDa

Gene Summary: The protein encoded by this gene regulates the DNA damage response through several different signaling pathways. One such pathway is the p53-HDM2-p21(WAF1) pathway, which is critical to the DNA damage response. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2015]

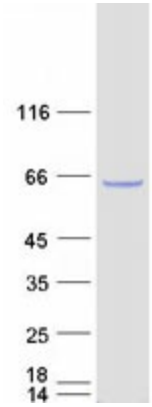
Product images:



Circular map for RC204658



Western blot validation of overexpression lysate (Cat# [LY413633]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204658 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CDKN2AIP protein (Cat# [TP304658]). The protein was produced from HEK293T cells transfected with CDKN2AIP cDNA clone (Cat# RC204658) using MegaTran 2.0 (Cat# [TT210002]).