RPA2 cDNA

Catalog Number: ATGD0142

PRODUCT INFORMATION

Catalog number
ATGD0142

Product type
cDNA

Species
Human

NCBI Accession No.
NP_002937.1

Alternative Names
REPA2, RP-A p32, RP-A p34, RPA32

mRNA Refseq
NM_002946.4

OMIM
179836

Chromosome location
1p35

PRODUCT SPECIFICATION

Formulation
Lyophilized

Storage
Store the plasmid at -20C.

cDNA Size
813bp

Preparation before usage
1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA.
Each tube contains approximately 10ug of lyophilized plasmid.

Vector description
This shuttle vector contains the complete ORF. It is inseted BamH I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

Cloning Vector
pATGen (puc19-derived cloning vector)

General Description

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As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds and stabilizes single-stranded DNA intermediates, that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different proteins and complexes involved in DNA metabolism. Thereby, RPA2 plays an essential role both in DNA replication and the cellular response to DNA damage. In the cellular response to DNA damage, the RPA complex controls DNA repair and DNA damage checkpoint activation. Through recruitment of ATRIP activates the ATR kinase a master regulator of the DNA damage response. RPA2 is required for the recruitment of the DNA double-strand break repair factors RAD51 and RAD52 to chromatin in response to DNA damage. Also recruits to sites of DNA damage proteins like XPA and XPG that are involved in nucleotide excision repair and is required for this mechanism of DNA repair.

DATA

Sequence nucleotides

ATGTGGAACAGTGGATTCGAAAGCTATGGCAGCTCCTCATACGGGGGAGCCGGCGGCTACACGCAGTCCCCGGGGGGCTT
TGGATCGCCCGCACCTTCTCAAGCCGAAAAGAAATCAAGAGCCCGAGCCCAGCACATTGTGCCCTGTACTATATCTCAGCTG
CTTTCTGCCACTTTGGTTGATGAAGTGTTCAGAATTGGGAATGTTGAGATTTCACAGGTCACTATTGTGGGGATCATCAGAC
ATGCAGAGAAGGCTCCAACCAACATTGTTTACAAAATAGATGACATGACAGCTGCACCCATGGACGTTCGCCAGTGGGTTG
ACACAGATGACACCAGCAGTGAAAACACTGTGGTTCCTCCAGAAACATATGTGAAAGTGGCAGGCCACCTGAGATCTTTTCA
GAACAAAAAGAGCCTGGTAGCCTTTAAGATCATGCCCCTGGAGGATATGAATGAGTTCACCACACATATTCTGGAAGTGATC
AATGCACACATGGTACTAAGCAAAGCCAACAGCCAGCCCTCAGCAGGGAGAGCACCTATCAGCAATCCAGGAATGAGTGAA
GCAGGGAACTTTGGTGGGAATAGCTTCATGCCAGCAAATGGCCTCACTGTGGCCCAAAACCAGGTGTTGAATTTGATTAAG
GCTTGTCCAAGACCTGAAGGGTTGAACTTTCAGGATCTCAAGAACCAGCTGAAACACATGTCTGTATCCTCAATCAAGCAAG
CTGTGGATTTTCTGAGCAATGAGGGGCACATCTATTCTACTGTGGATGATGACCATTTTAAATCCACAGATGCAGAATAA

Transaction Sequence

MWNSGFESYG SSSYGGAGGY TQSPGGFGSP APSQAEKKSR ARAQHIVPCT ISQLLSATLVDEVFRIGNVE ISQVTIVGII
RHAEKAPTNI VYKIDDMTAA PMDVRQWVDT DDTSSENTVVPPETYVKVAG HLRSFQNKKS LVAFKIMPLE DMNEFTTHIL
EVINAHMVLS KANSQPSAGRAPISNPGMSE AGNFGGNSFM PANGLTVAQN QVLNLIKACP RPEGLNFQDL
KNQLKHMSVSSIKQAVDFLS NEGHIYSTVD DDHFKSTDAE