

Product datasheet for **RC236721**

RAD52 (NM_001297420) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RAD52 (NM_001297420) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RAD52
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC236721 representing NM_001297420
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCTGGGACTGAGGAAGCAATCTTGGAGGACGTGACAGCCATCCTGCTGCTGGCGCGGCTCAGTGT
TATGCTTTGGACAGTGCCAGTACACAGCAGAAGAGTACCAGGCCATCCAGAAGGCCCTGAGGCAGAGGCT
GGGCCAGAATACATAAGTAGCCGCATGGCTGGCGGAGGCCAGAAGGTGTGCTACATTGAGGGTCATCGG
GTAATTAATCTGGCCAATGAGATGTTTGGTTACAATGGCTGGGCACACTCCATCACGCAGCAGAATGTGG
ATTTTGTGACCTCAACAATGGCAAGTTCTACGTGGGAGTCTGTGCATTTGTGAGGGTCCAGCTGAAGGA
TGGTTCATATCATGAAGATGTTGGTTAGTGTGAGGGCCCAAGTCCAAGCTTTATCTTTGGAG
AAGGCAAGGAAGGAGGCGGTGACAGACGGGCTGAAGCGAGCCCTCAGGCTTCCCTTGCTGGGAGTAAGTG
GTAGAATCCTGTACTCTCTCTTCTCCGTGCACTCAGTCATGTGTGCCGGAGGCCTTCCCACTCCTACTGC
GAGTGCACAGACAGCACCTCCTCTCCGTGCTCCTCAGCAGTCTCCGCTACGCACAGGAGTTTTGGGAA
TGCACTTGGAACTGTATTCTGGACAAAGACTACCTGAGATCACTAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236721 representing NM_001297420
Red=Cloning site Green=Tags(s)

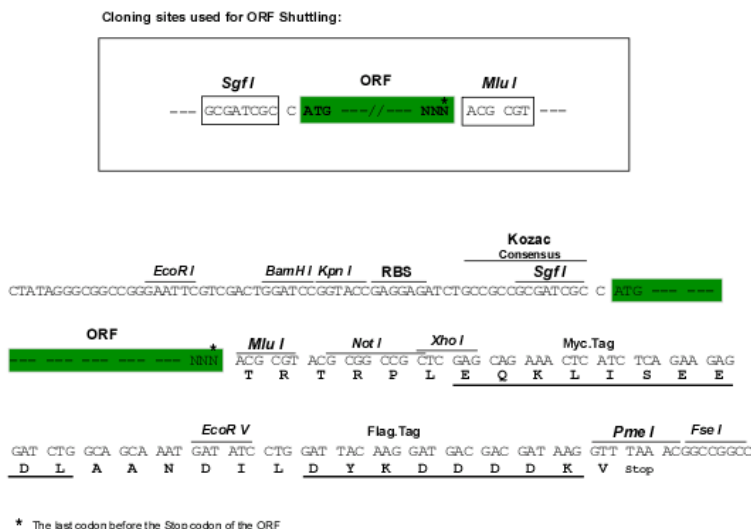
MSGTEEAILGGRDSPAAGGGSVLCFGQCQYTAEEYQAIQKALRQRLGPEYISSRMAGGGQKVCYIEGHR
VINLANEMFGYNGWAHSITQQNVDFVDLNNKFFVGVCAFVRVQLKDGSYHEDVGVVSEGLKSKALSLE
KARKEAVTDGLKRALRPLLVGSGRILYSLFVHVSVMCAGGLPTPTASAQTAPSSPCSSAVLRYAQEFWE
CTWKLYSGQRLPEITK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001297420

ORF Size: 678 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: [NM_001297420.1](#), [NP_001284349.1](#)

RefSeq Size: 712 bp

RefSeq ORF: 681 bp

Locus ID: 5893

UniProt ID: [P43351](#)

Cytogenetics: 12p13.33

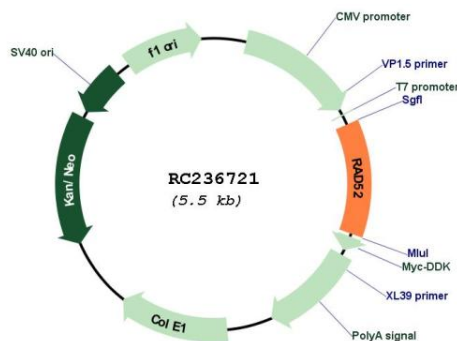
Protein Families: Druggable Genome

Protein Pathways: Homologous recombination

MW: 25 kDa

Gene Summary: The protein encoded by this gene shares similarity with *Saccharomyces cerevisiae* Rad52, a protein important for DNA double-strand break repair and homologous recombination. This gene product was shown to bind single-stranded DNA ends, and mediate the DNA-DNA interaction necessary for the annealing of complementary DNA strands. It was also found to interact with DNA recombination protein RAD51, which suggested its role in RAD51 related DNA recombination and repair. A pseudogene of this gene is present on chromosome 2. Alternative splicing results in multiple transcript variants. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Jul 2014]

Product images:



Circular map for RC236721