

Product datasheet for **RG236721**

RAD52 (NM_001297420) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAD52 (NM_001297420) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RAD52
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG236721 representing NM_001297420. Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**GCGATCGCC**
 ATGCTGGGACTGAGGAAGCAATCTTGGAGGACGTGACAGCCATCCTGCTGCTGGCGCGGCTCAGTG
 TTATGCTTTGGACAGTGCCAGTACACAGCAGAAGAGTACCAGGCCATCCAGAAGGCCCTGAGGCAGAGG
 CTGGGCCCAAGATACATAAGTAGCCGATGGCTGGCGGAGGCCAGAAGGTGTGCTACATTGAGGGTCAT
 CGGGAATTAATCTGGCCAATGAGATGTTTGGTTACAATGGCTGGGCACACTCCATCAGCAGCAGAAT
 GTGGATTTTGTGACCTCAACAATGGCAAGTTCTACGTGGGAGTCTGTGCATTTGTGAGGGTCCAGCTG
 AAGGATGGTTCATATCATGAAGATGTTGGTTATGGTGTAGTGAAGGCCCTCAAGTCCAAGCCTTTATCT
 TTGGAGAAGGCAAGGAAGGAGGCGGTGACAGACGGCTGAAGCGAGCCCTCAGGCTTCCCTTGCTGGGA
 GTAAGTGGTAGAATCCTGTACTCTCTCTCCGTGCACTCAGTCATGTGTGCCGAGGCCCTCCCACT
 CCTACTGCGAGTGACAGACAGCACCCCTCCTCTCCGTGCTCCTCAGCAGTCTCCGCTACGCACAGGAG
 TTTTGGGAATGCACTTGGAAGTGTATTCTGGACAAAGACTACCTGAGATCACTAAA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

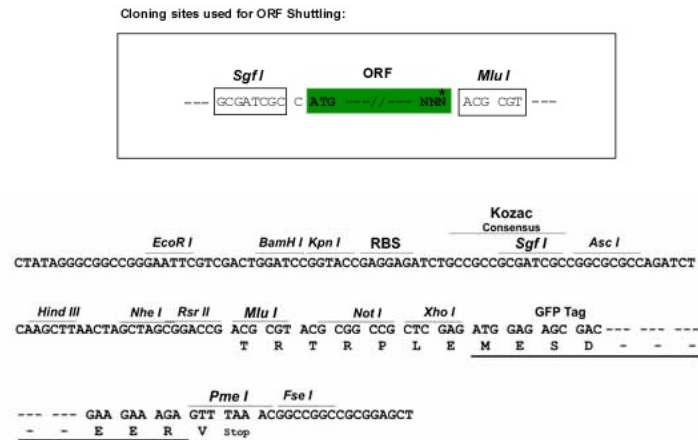
Protein Sequence:	>Peptide sequence encoded by RG236721 Blue=ORF Red=Cloning site Green=Tag(s)
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MSGTEEAILGGRDSPAAGGGSVLCFGQCQYTAEEYQAIQKALRQLGPEYISSRMAGGGQKVCYIEGH
 RVINLANEMFGYNGWAHSITQQNVDFDLNNGKFYVGVCAFVRVQLKDGSYHEDVGYGVSGLKSKALS
 LEKARKEAVTDGLKRALRLPLLVSGRILYSLFSVHSMCAGGLPTPTASQTAPSSPCSSAVLRYAQE
 FWECTWKLYSGQRLPEITK
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNTAVEHLHPMGDNDLDGSFTRTSLRDGGYSSVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERY

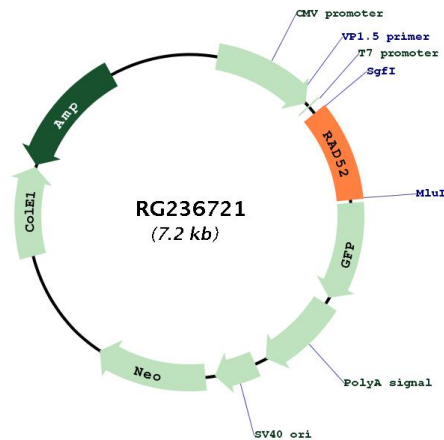

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Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



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).
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:	<p>The protein encoded by this gene shares similarity with <i>Saccharomyces cerevisiae</i> 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]</p>