

Product datasheet for **RG237585**

RAD52 (NM_001297421) Human Tagged ORF Clone

Product data:

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|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | RAD52 (NM_001297421) 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: | >RG237585 representing NM_001297421. Blue=ORF Red=Cloning site Green=Tag(s) |

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTTGGTTACAATGGCTGGGCACACTCCATCACGCAGCAGAATGTGGATTTTGTGACCTCAACAAT
GGCAAGTTCTACGTGGGAGTCTGTGCATTTGTGAGGGTCCAGCTGAAGGATGGTTCATATCATGAAGAT
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GACTACCTGAGATCACTAAATAAGCTTCCACGCCAGTTGCCTCTTGAAGTGGATTTAACTAAAGCGAAG
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TGCAGCTCCCGAAGCCTGAGCTCATCCGCCGTGGAGAGCGAGGCCACGCACCAGCGGAAGCTCCGGCAG
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CAGAAACCACAAGCAAAATCTGGATCTTGGACCTCCAACTTATAGCGCTGACCAACGCACAACAGGA
AACTGGGAATTCATAGGAAGAGCCAGGACATGAAGAAAAGGAAATATGATCCATCT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG237585
 Blue=ORF Red=Cloning site Green=Tag(s)

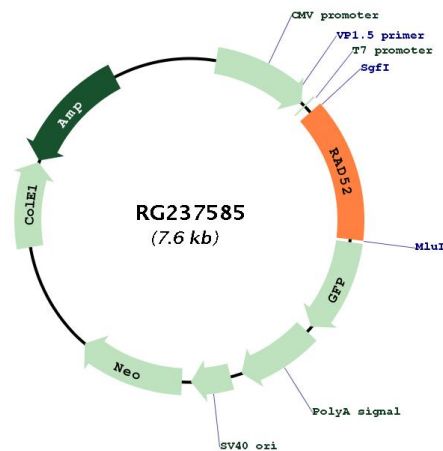
MFGYNGWAHSITQQNVDFVDLNNKGFYVGVCAFVRVQLKDGSYHEDVGYGVSEGLKSKALSLEKARKEA
 VTDGLKRALRSFGNALGNCILDKDYLRSLNKLPRQLPLEVDLTKAKRQDLEPSVEEARYNSCRPNMALG
 HPQLQQVTSRPSRSHAVIPADQDCSSRSLSSSAVESEATHQRKLRQKQLQQQFRERMEKQVVRVSTPSA
 EKSEAAPPAPPVTHSTPVTVSEPLLEKDFLAGVTQELIKTLEDNSEKWAIVTPDAGDGVVVKPSSRADPAQ
 TSDTLALNNQMVTONRTPHSVCHQKPAKSGSWDLQTYSDAQRTTGNWESHKRSQDMKKRKYDPS
 TRTRPLEME SDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



| | |
|--------------------------|--|
| ACCN: | NM_001297421 |
| ORF Size: | 1023 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_001297421.1 , NP_001284350.1 |
| RefSeq Size: | 2847 bp |
| RefSeq ORF: | 1026 bp |
| Locus ID: | 5893 |
| Cytogenetics: | 12p13.33 |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Homologous recombination |
| MW: | 38.4 kDa |
| Gene Summary: | 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] |