

## Product datasheet for **RG238113**

### **RAD52 (NM\_001297419) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RAD52 (NM_001297419) 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:	>RG238113 representing NM_001297419. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCTGGGACTGAGGAAGCAATCTTGGAGGACGTGACAGCCATCCTGCTGCTGGCGGGCTCAGTG
TTATGCTTTGGACAGTGCCAGTACACAGCAGAAGAGTACCAGGCCATCCAGAAGGCCCTGAGGCAGAGG
CTGGGCCCAGAATACATAAGTAGCCGATGGCTGGCGGAGGCCAGAAGGTGTGCTACATTGAGGGTCAT
CGGGTAATTAATCTGGCCAATGAGATGTTTGGTTACAATGGCTGGGCACACTCCATCACGCAGCAGAAT
GTGGATTTTGTGACCTCAACAATGGCAAGTTCTACGTGGGAGTCTGTGCATTTGTGAGGGTCCAGCTG
AAGGATGGTTCATATCATGAAGATGTTGGTTATGGTTAGTGAGGGCCCAAGTCCAAGGCTTTATCT
TTGGAGAAGGCAAGGAAGGAGCGGTGACAGACGGGCTGAAGCGAGCCCTCAGGAGTTTTGGGAATGCA
CTTGAAAATGATTCTGGACAAAGACTACCTGAGATCACTAAATAAGCTTCCACGCCAGTTGCCTCTT
GAAGTGGATTTAACTAAAGCGAAGAGACAAGATCTTGAACCGTCTGTGGAGGAGGCAAGATAACAACAGC
TGCCGACCGAACATGGCCCTGGGACACCCACAGCTGCAGCAGGTGACCTCCCCTTCCAGACCCAGCCAT
GCTGTGATACCGGCGGACCAGGACTGCAGCTCCCGAAGCCTGAGCTCATCCGCCGTGGAGAGCGAGGCC
ACGCACCAGCGGAAGCTCCGGCAGAAGCAGCTGCAGCAGCAGTCCGGGAGCGGATGGAGAAGCAGCAG
GTTTCGAGTCTCCACGCCGTGAGCTGAGAAGAGTGAGGCAGCGCCTCCGGCCCTCCTGTGACGCACAGC
ACTCCTGTAAGTGTCTCAGAACCCTCCTGGAGAAAGACTTCTTGCAGGAGTGACTCAAGAATTAATC
AAGACTCTTGAAGACAACCTCTGAAAAGTGGGCTGTGACTCCCGATGCAGGGGATGGTGTGGTCAAGCCC
TCGTCTAGAGCAGACCCAGCCAGACCTCTGACACATTAGCCTTGAACAACCAGATGGTGACCCAGAAC
AGGACTCCACACAGCGTTTGGCCACCAGAAACCACAAGCAAAATCTGGATCTTGGGACCTCCAAAATAT
AGCGCTGACCAACGCACAACAGGAAACTGGGAATCTCATAGGAAGAGCCAGGACATGAAGAAAAGGAAA
TATGATCCATCT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



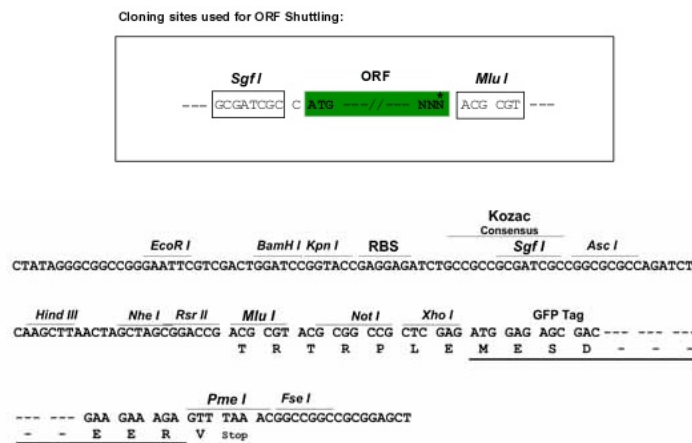
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG238113  
 Blue=ORF Red=Cloning site Green=Tag(s)

MSGTEEAILGGRDShPAAGGGSVL CFGQCQYTAEEYQAIQKALRQRLGPEYISSRMAGGGQKVCYIEGH  
 RVINLANEMFGYNGWAHSITQQNVDFVDLNNKFYVGVCAFVRVQLKDGSYHEDVGVVSEGLKSKALS  
 LEKARKEAVTDGLKRALRSFGNALGNCILDKDYLRSLNKLPRQLPLEVDLTKAKRQDLEPSVEEARVNS  
 CRPNMALGHPQLQQVTPSRPShAVIPADQDCSSRSLSSAVESEATHQRKLRQKQLQQQFRERMEKQQ  
 VRVSTPSAEKSEAAPPAPPVTHSTPVTVSEPLLEKDFLAGVTQELIKTLEDNSEKWAVTPDAGDGVVKP  
 SSRADPAQTSIDLALNNQMVQTQNRTPHSVCHQKPKQAKSGSWDLQTYADQRTTGNWESHRSQDMKKRK  
 YDPS  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDShMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001297419

**ORF Size:** 1254 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\\_001297419.1](#), [NP\\_001284348.1](#)

RefSeq Size: 3163 bp

RefSeq ORF: 1257 bp

Locus ID: 5893

UniProt ID: [P43351](#)

Cytogenetics: 12p13.33

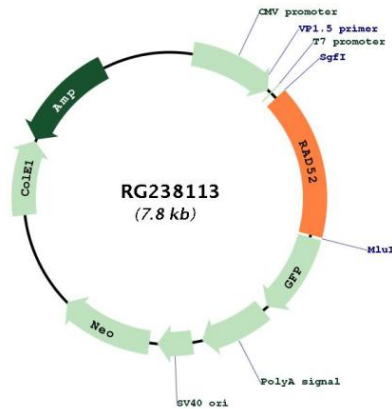
Protein Families: Druggable Genome

Protein Pathways: Homologous recombination

MW: 46.2 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 RG238113