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Product datasheet for RG201576

RAD1 (NM_133377) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAD1 (NM_133377) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RAD1
Synonyms:	cell cycle checkpoint protein Hrad1; checkpoint control protein HRAD1; DNA repair exonuclease REC1; exonuclease homolog RAD1; HRAD1; OTTHUMP00000115992; RAD1 homolog; RAD1 homolog (S. pombe); Rad1-like DNA damage checkpoint; REC1; REC1, HRAD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG201576 representing NM_133377
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCCTTCTGACCCAACAGATCCAAGACGAGGATGATCAGTACAGCCTTGTGGCCAGCCTTGACAACG
TTAGGAATCTCTCCACTATCTTGAAAGCTATTCATTTCCGAGAACATGCCACGTGTTTCGCAACTAAAAA
TGGTATCAAAGTAACAGTGGAAAATGCAAAGTGTGTGCAAGCAAATGCTTTTATTCAGGCTGGAATATTT
CAGGAGTTTAAAGTTCAGGAAGAGTCTGTTACTTTTCGAATTAATTTAACTGTCCTTTTAGACTGTTTAT
CTATTTTTGGATCAAGTCCTATGCCAGGGACTTTAACTGCACTTCGAATGTGTTACCAAGGTTATGGTTA
CCCTTTGATGCTGTTCCTGGAAGAAGGAGGAGTGGTGACAGTCTGCAAAATCAATACACAGGAACCTGAG
GAGACCCTGGACTTTGATTTCTGCAGCACCAATGTTATTAATAAAATTATTCTGCAGTCAGAGGGGCTCC
GTGAAGCATTTTCTGAATTGGATATGACGAGTGAAGTCCTACAAATTACCATGTCTCCTGACAAGCCTTA
TTTCAGGTTATCTACTTTTGGAAATGCAGGAAGTTCCCACCTTGACTATCCCAAAGATTCTGATTTGATG
GAAGCATTTCATTGTAATCAGACCCAAGTCAACAGATACAAGATTTCCTTACTGAAACCCTCTACAAAGG
CATTAGTCCTATCTTGTAAGGTATCTATTCGGACAGATAACAGAGGCTTCCTTTCATTACAGTATATGAT
TAGAAATGAAGATGGACAAATATGTTTTGTGGAATATTACTGCTGCCCTGATGAAGAAGTTCCTGAATCT
GAGTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

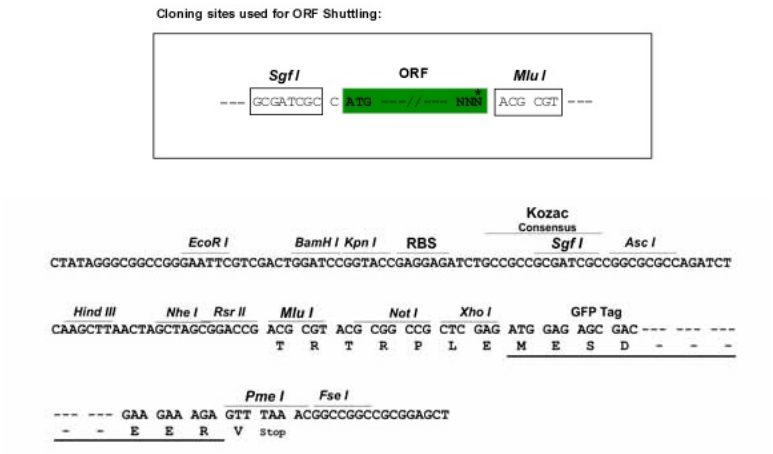
>RG201576 representing NM_133377
Red=Cloning site Green=Tags(s)

MPLLTQQIQDEDDQYSLVASLDNVRNLSTILKAIHFREHATCFATKNGIKVTVENAKCVQANAFIQAGIF
QEFKVQEESVTFRINLTVLLDCLSIFGSSPMPGTLTALRMCYQGYGYPLMLFLEEGGVVTVCKINTQEPE
ETLDFDFCSTNVINKIILQSEGLREAFSELDMTSEVLQITMSPDKPYFRLSTFGNAGSSHLDYPKDSDLM
EAFHCNQTQVNRYKISLLKPSTKALVLSCKVSIRTDNRGFLSLQYMIRNEDGQICFVEYYCCPDEEVPES
ES

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_133377

ORF Size: 846 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_133377.2, NP_596868.1

RefSeq Size: 4765 bp

RefSeq ORF: 848 bp

Locus ID: 5810

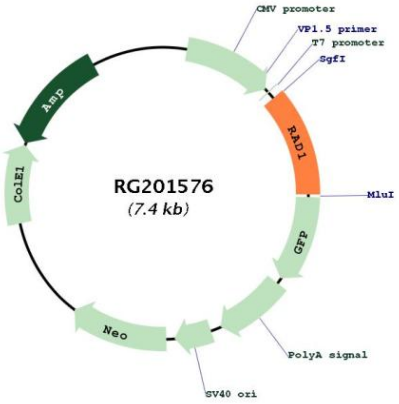
Cytogenetics: 5p13.2

Domains: Rad1

Protein Families: Druggable Genome

Gene Summary: This gene encodes a component of a heterotrimeric cell cycle checkpoint complex, known as the 9-1-1 complex, that is activated to stop cell cycle progression in response to DNA damage or incomplete DNA replication. The 9-1-1 complex is recruited by RAD17 to affected sites where it may attract specialized DNA polymerases and other DNA repair effectors. Alternatively spliced transcript variants of this gene have been described. [provided by RefSeq, Jan 2009]

Product images:



Circular map for RG201576