

### **Product datasheet for MR210443L4**

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OriGene Technologies, Inc.

## Rad54l (NM\_001122958) Mouse Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Rad54l (NM\_001122958) Mouse Tagged Lenti ORF Clone

Tag:mGFPSymbol:Rad54lSynonyms:RAD54

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

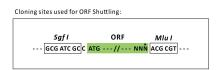
E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR210443).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

ACCN: NM\_001122958

ORF Size: 2244 bp



#### Rad54l (NM\_001122958) Mouse Tagged Lenti ORF Clone - MR210443L4

**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:** <u>NM 001122958.1, NP 001116430.1</u>

 RefSeq Size:
 2763 bp

 RefSeq ORF:
 2244 bp

 Locus ID:
 19366

 UniProt ID:
 P70270

 Cytogenetics:
 4 D1

**Gene Summary:** Involved in DNA repair and mitotic recombination. Functions in the recombinational DNA

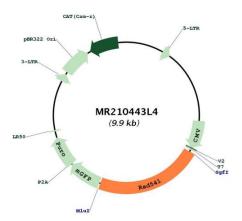
repair (RAD52) pathway. Dissociates RAD51 from nucleoprotein filaments formed on dsDNA. Could be involved in the turnover of RAD51 protein-dsDNA filaments (By similarity). Deficient mice also show significantly shorter telomeres than wild-type controls, indicating that the protein activity plays an essential role in telomere length maintenance in mammals. Deficiency also resulted in an increased frequency of end-to-end chromosome fusions involving telomeres compared to the controls, suggesting a putative role in telomere capping. Non-homologous end joining (NHEJ) and homologous recombination (HR) represent the two

major pathways of DNA double-strand break (DSB) repair in eukaryotic cells. LIG4 and RAD54L cooperate to support cellular proliferation, repair spontaneous DSBs, and prevent

chromosome and single chromatid aberrations.[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for MR210443L4