

## Product datasheet for **MR221645L4V**

### Rad54l (NM\_009015) Mouse Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Rad54l (NM_009015) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Rad54l
Synonyms:	RAD54
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_009015
ORF Size:	2244 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR221645).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_009015.3</a>
RefSeq Size:	3093 bp
RefSeq ORF:	2244 bp
Locus ID:	19366
UniProt ID:	<a href="#">P70270</a>
Cytogenetics:	4 D1



[View online »](#)

**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]