

Product datasheet for **MR205059L4V**

Rad51 (NM_011234) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Rad51 (NM_011234) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Rad51
Synonyms:	AV304093; Rad51a; Reca
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_011234
ORF Size:	1020 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR205059).
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.
RefSeq:	NM_011234.2
RefSeq Size:	2138 bp
RefSeq ORF:	1020 bp
Locus ID:	19361
UniProt ID:	Q08297
Cytogenetics:	2 59.92 cM



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Gene Summary:

Plays an important role in homologous strand exchange, a key step in DNA repair through homologous recombination (HR) (PubMed:15834424). Binds to single and double-stranded DNA and exhibits DNA-dependent ATPase activity. Catalyzes the recognition of homology and strand exchange between homologous DNA partners to form a joint molecule between a processed DNA break and the repair template. Binds to single-stranded DNA in an ATP-dependent manner to form nucleoprotein filaments which are essential for the homology search and strand exchange. Part of a PALB2-scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51C and XRCC3. Also involved in interstrand cross-link repair (By similarity). [UniProtKB/Swiss-Prot Function]