

Product datasheet for **RC228212L4V**

RAD51 (NM_001164270) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Symbol:	RAD51
Synonyms:	BRCC5; FANCR; HRAD51; HsRad51; HsT16930; MRMV2; RAD51A; RECA
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001164270
ORF Size:	840 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC228212).
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_001164270.1
RefSeq ORF:	843 bp
Locus ID:	5888
UniProt ID:	Q06609
Cytogenetics:	15q15.1
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors



Protein Pathways: Homologous recombination, Pancreatic cancer, Pathways in cancer

MW: 30.8 kDa

Gene Summary: The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and *Saccharomyces cerevisiae* Rad51, and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with the ssDNA-binding protein RPA and RAD52, and it is thought to play roles in homologous pairing and strand transfer of DNA. This protein is also found to interact with BRCA1 and BRCA2, which may be important for the cellular response to DNA damage. BRCA2 is shown to regulate both the intracellular localization and DNA-binding ability of this protein. Loss of these controls following BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2009]