

## Product datasheet for **TR302130**

### **RAD51 Human shRNA Plasmid Kit (Locus ID 5888)**

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	RAD51 Human shRNA Plasmid Kit (Locus ID 5888)
Locus ID:	5888
Synonyms:	BRCC5; FANCR; HRAD51; HsRad51; HsT16930; MRMV2; RAD51A; RECA
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	RAD51 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5888). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001164269</a> , <a href="#">NM_001164270</a> , <a href="#">NM_002875</a> , <a href="#">NM_133487</a> , <a href="#">NM_133487.1</a> , <a href="#">NM_133487.2</a> , <a href="#">NM_133487.3</a> , <a href="#">NM_002875.1</a> , <a href="#">NM_002875.2</a> , <a href="#">NM_002875.3</a> , <a href="#">NM_002875.4</a> , <a href="#">NM_001164270.1</a> , <a href="#">NM_001164269.1</a> , <a href="#">BC001459</a> , <a href="#">BC001459.2</a> , <a href="#">NM_001164270.2</a> , <a href="#">NM_002875.5</a> , <a href="#">NM_001164269.2</a>
UniProt ID:	<a href="#">Q06609</a>
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).