

## Product datasheet for **TR302133**

### **RAD17 Human shRNA Plasmid Kit (Locus ID 5884)**

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	RAD17 Human shRNA Plasmid Kit (Locus ID 5884)
Locus ID:	5884
Synonyms:	CCYC; HRAD17; R24L; RAD17SP; RAD24
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	RAD17 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5884). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001278622</a> , <a href="#">NM_002873</a> , <a href="#">NM_133338</a> , <a href="#">NM_133339</a> , <a href="#">NM_133340</a> , <a href="#">NM_133341</a> , <a href="#">NM_133342</a> , <a href="#">NM_133343</a> , <a href="#">NM_133344</a> , <a href="#">NM_002873.1</a> , <a href="#">NM_133340.1</a> , <a href="#">NM_133340.2</a> , <a href="#">NM_133343.1</a> , <a href="#">NM_133344.1</a> , <a href="#">NM_133344.2</a> , <a href="#">NM_133342.1</a> , <a href="#">NM_133342.2</a> , <a href="#">NM_133339.1</a> , <a href="#">NM_133339.2</a> , <a href="#">NM_133341.1</a> , <a href="#">NM_133341.2</a> , <a href="#">NM_133338.1</a> , <a href="#">NM_133338.2</a> , <a href="#">NM_001278622.1</a> , <a href="#">BC032304</a> , <a href="#">BC032304.1</a> , <a href="#">BC018110</a> , <a href="#">NM_133338.3</a> , <a href="#">NM_133344.3</a> , <a href="#">NM_133342.3</a>
UniProt ID:	<a href="#">O75943</a>
Summary:	The protein encoded by this gene is highly similar to the gene product of <i>Schizosaccharomyces pombe rad17</i> , a cell cycle checkpoint gene required for cell cycle arrest and DNA damage repair in response to DNA damage. This protein shares strong similarity with DNA replication factor C (RFC), and can form a complex with RFCs. This protein binds to chromatin prior to DNA damage and is phosphorylated by the checkpoint kinase ATR following damage. This protein recruits the RAD1-RAD9-HUS1 checkpoint protein complex onto chromatin after DNA damage, which may be required for its phosphorylation. The phosphorylation of this protein is required for the DNA-damage-induced cell cycle G2 arrest, and is thought to be a critical early event during checkpoint signaling in DNA-damaged cells. Multiple alternatively spliced transcript variants of this gene, which encode four distinct protein isoforms, have been reported. Two pseudogenes, located on chromosomes 7 and 13, have been identified. [provided by RefSeq, Jul 2013]



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- 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 [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- 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).