

## Product datasheet for **TR307851**

### GEN1 Human shRNA Plasmid Kit (Locus ID 348654)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	GEN1 Human shRNA Plasmid Kit (Locus ID 348654)
Locus ID:	348654
Synonyms:	Gen
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	GEN1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 348654). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001130009</a> , <a href="#">NM_182625</a> , <a href="#">NM_182625.1</a> , <a href="#">NM_182625.2</a> , <a href="#">NM_182625.3</a> , <a href="#">NM_182625.4</a> , <a href="#">NM_001130009.1</a> , <a href="#">NM_001130009.2</a> , <a href="#">BC117204</a> , <a href="#">BC035863</a> , <a href="#">BC038243</a> , <a href="#">BC117206</a> , <a href="#">NM_001130009.3</a> , <a href="#">NM_182625.5</a>
UniProt ID:	<a href="#">Q17RS7</a>
Summary:	This gene encodes a member of the Rad2/xeroderma pigmentosum group G nuclease family, whose members are characterized by N-terminal and internal xeroderma pigmentosum group G nuclease domains followed by helix-hairpin-helix domains and disordered C-terminal domains. The protein encoded by this gene is involved in resolution of Holliday junctions, which are intermediate four-way structures that covalently link DNA during homologous recombination and double-strand break repair. The protein resolves Holliday junctions by creating dual incisions across the junction to produce nicked duplex products that can be ligated. In addition, this protein has been found to localize to centrosomes where it has been implicated in regulation of centrosome integrity. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2016]
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> .



[View online »](#)

**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).