

Product datasheet for TL302128

OriGene Technologies, Inc.

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Rad51L1 (RAD51B) Human shRNA Plasmid Kit (Locus ID 5890)

Product data:

Product Type: shRNA Plasmids

Product Name: Rad51L1 (RAD51B) Human shRNA Plasmid Kit (Locus ID 5890)

Locus ID: 5890

Synonyms: R51H2; RAD51L1; REC2

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: RAD51B - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5890).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: BC030219, NM 002877, NM 133509, NM 133510, NM 001321809, NM 001321810,

NM 001321812, NM 001321814, NM 001321815, NM 001321817, NM 001321818,

NM 001321819, NM 001321821, NM 133509.1, NM 133509.2, NM 002877.1, NM 002877.2,

NM 002877.3, NM 002877.5, NM 133510.1, NM 133510.2, BC030219.1, BM671299,

NM 002877.6, NM 133509.4, NM 133510.4

UniProt ID: <u>015315</u>

Summary: The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family

members are evolutionarily conserved proteins essential for DNA repair by homologous recombination. This protein has been shown to form a stable heterodimer with the family member RAD51C, which further interacts with the other family members, such as RAD51, XRCC2, and XRCC3. Overexpression of this gene was found to cause cell cycle G1 delay and

cell apoptosis, which suggested a role of this protein in sensing DNA damage.

Rearrangements between this locus and high mobility group AT-hook 2 (HMGA2, GeneID 8091) have been observed in uterine leiomyomata. [provided by RefSeq, Mar 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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).