

Product datasheet for TR515270

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

EU: info-de@origene.com CN: techsupport@origene.cn

Pot1a Mouse shRNA Plasmid (Locus ID 101185)

Product data:

Product Type: shRNA Plasmids

Product Name: Pot1a Mouse shRNA Plasmid (Locus ID 101185)

Locus ID:

1500031H18Rik; AI851169; Pot1 Synonyms:

Vector: pRS (TR20003)

E. coli Selection: Ampicillin Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Pot1a - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

101185). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

BC016121, NM 133931, NM 133931.1, NM 133931.2, NM 133931.3, NM 133931.4, RefSeq:

NM 133931.5

UniProt ID: Q91WC1

Summary: Component of the telomerase ribonucleoprotein (RNP) complex that is essential for the

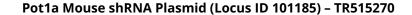
> replication of chromosome termini. Is a component of the double-stranded telomeric DNAbinding TRF1 complex which is involved in the regulation of telomere length by cis-inhibition of telomerase. Also acts as a single-stranded telomeric DNA-binding protein and thus may act

as a downstream effector of the TRF1 complex and may transduce information about telomere maintenance and/or length to the telomere terminus. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded TTAGGG repeats added by telomerase and protects chromosome ends; without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways. Binds to two or more telomeric single-stranded 5'-

TTAGGG-3' repeats (G-strand) and with high specificity to a minimal telomeric single-stranded 5'-TAGGGTTAG-3' sequence. Binds telomeric single-stranded sequences internally or at proximity of a 3'-end. Its activity is TERT dependent but it does not increase TERT activity (By

similarity).[UniProtKB/Swiss-Prot Function]







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