

Product datasheet for TR702485

Tex19.1 Rat shRNA Plasmid (Locus ID 498033)

Product data:

Product Type: shRNA Plasmids

Locus ID: 498033

Synonyms: Tex19; Tex19a

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Tex19.1 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

498033). 5µg purified plasmid DNA per construct

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

RefSeq: <u>NM_001017482</u>, <u>NM_001017482.1</u>, <u>BC083916</u>

UniProt ID: Q5XHY3

Summary: Required during spermatogenesis and placenta development, participating in the repression

of retrotransposable elements and prevent their mobilization. Collaborates with the Piwi-interacting RNA (piRNA) pathway, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins. Interacts with Piwi proteins and directly binds piRNAs, a class of 24 to 30 nucleotide RNAs that are generated by a Dicer-independent mechanism and are primarily derived from transposons and other repeated sequence elements. Also during spermatogenesis, promotes, with UBR2, SPO11-dependent recombination foci to accumulate and drive robust homologous chromosome

synapsis. Interacts with LINE-1 retrotransposon encoded LIRE1, stimulates LIRE1

polyubiquitination, mediated by UBR2, and degradation, inhibiting LINE-1 retranstoposon

mobilization.[UniProtKB/Swiss-Prot Function]



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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. 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 quaranteed 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).