

## Product datasheet for TR300431

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## XIST Human shRNA Plasmid Kit (Locus ID 7503)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** XIST Human shRNA Plasmid Kit (Locus ID 7503)

**Locus ID:** 7503

Synonyms: DXS399E; DXS1089; LINC00001; NCRNA00001; swd66; SXI1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

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

7503). 5µg purified plasmid DNA per construct

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

RefSeq: <u>NR 001564, NR 001564.1</u>

**Summary:** X inactivation is an early developmental process in mammalian females that transcriptionally

silences one of the pair of X chromosomes, thus providing dosage equivalence between males and females. The process is regulated by several factors, including a region of chromosome X called the X inactivation center (XIC). The XIC comprises several non-coding and protein-coding genes, and this gene was the first non-coding gene identified within the XIC. This gene is expressed exclusively from the XIC of the inactive X chromosome, and is essential for the initiation and spread of X-inactivation. The transcript is a spliced RNA. Alternatively spliced transcript variants have been identified, but their full length sequences

have not been determined. Mutations in the XIST promoter cause familial skewed X

inactivation. [provided by RefSeq, Apr 2012]

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).