

## **Product datasheet for TR303095**

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## **MUS81 Human shRNA Plasmid Kit (Locus ID 80198)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: MUS81 Human shRNA Plasmid Kit (Locus ID 80198)

Locus ID: 80198
Synonyms: SLX3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MUS81 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

80198). 5µg purified plasmid DNA per construct

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

**RefSeq:** NM 025128, NM 001350283, NR 146598, NM 025128.1, NM 025128.2, NM 025128.3,

NM 025128.4, BC009999, BC009999.2

UniProt ID: Q96NY9

Summary: This gene encodes a structure-specific endonuclease which belongs to the XPF/MUS81

endonuclease family and plays a critical role in the resolution of recombination intermediates during DNA repair after inter-strand cross-links, replication fork collapse, and DNA double-strand breaks. The encoded protein associates with one of two closely related essential meiotic endonuclease proteins (EME1 or EME2) to form a complex that processes DNA secondary structures. It contains an N-terminal DEAH helicase domain, an excision repair cross complementation group 4 (ERCC4) endonuclease domain, and two tandem C-terminal helix-hairpin-helix domains. Mice with a homozygous knockout of the orthologous gene have significant meiotic defects including the failure to repair a subset of DNA double strand

breaks. [provided by RefSeq, Jun 2017]

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).