

## **Product datasheet for SR312276**

## OriGene Technologies, Inc.

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## MRI (C7orf49) Human siRNA Oligo Duplex (Locus ID 78996)

**Product data:** 

**Product Type:** siRNA Oligo Duplexes

Purity: HPLC purified

Quality Control: Tested by ESI-MS

Sequences: Available with shipment

**Stability:** One year from date of shipment when stored at -20°C.

# of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

**Note:** Single siRNA duplex (10nmol) can be ordered.

RefSeq: NM 001243749, NM 001243751, NM 001243752, NM 001243753, NM 001243754,

NM 001243755, NM 001305629, NM 001305630, NM 024033, NR 024185, NR 024186,

NM 001363329, NM 001363330

UniProt ID: Q9BWK5

Synonyms: C7orf49; MRI; MRI-2

Components: C7orf49 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 78996)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml

Summary: Isoform 1: Cell-cycle-specific inhibitor of classical non-homologous end joining (NHEJ) of DNA

double-strand break (DSB) repair during the S and G2 phases (PubMed:28959974). Acts as a regulator of DNA repair pathway choice by specifically inhibiting classical NHEJ during the S and G2 phases, thereby promoting error-free repair by homologous recombination during cell cycle phases when sister chromatids are present (PubMed:28959974). Preferentially protects single-stranded overhangs at break sites by inhibiting classical NHEJ, thereby creating a local environment that favors homologous recombination (PubMed:28959974). Acts via interaction with XRCC5/Ku80 and XRCC6/Ku70, interaction restricted during the S and

G2 phases only (PubMed:28959974). Molecular mechanisms governing classical NHEJ

inhibition via interaction with XRCC5/Ku80 and XRCC6/Ku70 are unknown

(PubMed:28959974). May act as a regulator of proteasome (By similarity).[UniProtKB/Swiss-

Prot Function]







## Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, 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 siRNA control (quantitative RT-PCR data required).