

## **Product datasheet for SR311990**

## OriGene Technologies, Inc.

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## MMS19 Human siRNA Oligo Duplex (Locus ID 64210)

**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 001289403, NM 001289404, NM 001289405, NM 022362, NM 001330128,

NM 001351356, NM 001351357, NM 001351358, NM 001351359

UniProt ID: Q96T76

Synonyms: CIAO4; hMMS19; MET18; MMS19L

Components: MMS19 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 64210)

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

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

Summary: Key component of the cytosolic iron-sulfur protein assembly (CIA) complex, a multiprotein

complex that mediates the incorporation of iron-sulfur cluster into apoproteins specifically involved in DNA metabolism and genomic integrity. In the CIA complex, MMS19 acts as an adapter between early-acting CIA components and a subset of cellular target iron-sulfur proteins such as ERCC2/XPD, FANCJ and RTEL1, thereby playing a key role in nucleotide excision repair (NER), homologous recombination-mediated double-strand break DNA repair,

DNA replication and RNA polymerase II (POL II) transcription (PubMed:22678362,

PubMed:22678361, PubMed:29225034, PubMed:23585563). As part of the mitotic spindle-associated MMXD complex, plays a role in chromosome segregation, probably by facilitating

iron-sulfur cluster assembly into ERCC2/XPD (PubMed:20797633). Indirectly acts as a transcriptional coactivator of estrogen receptor (ER), via its role in iron-sulfur insertion into some component of the TFIIH-machinery (PubMed:11279242). [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).