

## **Product datasheet for SR411921**

#### OriGene Technologies, Inc.

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## **Hmces Mouse siRNA Oligo Duplex (Locus ID 232210)**

#### **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 173737

UniProt ID: Q8R1M0

**Synonyms:** 8430410A17Rik; C85376

Components: Hmces (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 232210)

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

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

Summary: Sensor of abasic sites in single-stranded DNA (ssDNA) required to preserve genome integrity

by promoting error-free repair of abasic sites (By similarity). Acts as an enzyme that

recognizes and binds abasic sites in ssDNA at replication forks and chemically modifies the lesion by forming a covalent cross-link with DNA (By similarity). The HMCES DNA-protein cross-link is then degraded by the proteasome (By similarity). Promotes error-free repair of abasic sites by acting as a 'suicide' enzyme that is degraded, thereby protecting abasic sites from translesion synthesis (TLS) polymerases and endonucleases that are error-prone and would generate mutations and double-strand breaks (By similarity). Acts as a protease: mediates autocatalytic processing of its N-terminal methionine in order to expose the catalytic cysteine (PubMed:29020633). Specifically binds 5-hydroxymethylcytosine (5hmC)-containing DNA in stem cells (PubMed:23434322). May act as an endonuclease that

specifically cleaves 5hmC-containing DNA; additional experiments are however required to

confirm this activity in vivo (PubMed:29020633).[UniProtKB/Swiss-Prot Function]





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# 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).