

## **Product datasheet for SR422856**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Ythdc2 Mouse siRNA Oligo Duplex (Locus ID 240255)

**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:** <u>NM 001163013</u>

UniProt ID: B2RR83

**Synonyms:** 3010002F02Rik; BC037178

Components: Ythdc2 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 240255)

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

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

**Summary:** 3'-5' RNA helicase that plays a key role in the male and female germline by promoting

transition from mitotic to meiotic divisions in stem cells (PubMed:28380054,

PubMed:28809393, PubMed:29087293, PubMed:29033321, PubMed:29360036). Specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs, a modification present at internal sites of mRNAs and some non-coding RNAs that plays a role in the efficiency of RNA processing and stability (PubMed:29360036). Essential for ensuring a successful progression of the meiotic program in the germline by regulating the level of m6A-containing RNAs (PubMed:29033321). Acts by binding and promoting degradation of m6A-containing mRNAs: the 3'-5' RNA helicase activity is required for this process and RNA degradation may be mediated by XRN1 exoribonuclease (PubMed:29033321). Required for both spermatogenesis and oogenesis (PubMed:28809393, PubMed:29033321).[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).