

## **Product datasheet for SR306661**

### OriGene Technologies, Inc.

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## **CNAP1 (NCAPD2) Human siRNA Oligo Duplex (Locus ID 9918)**

#### **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 014865</u>

UniProt ID: Q15021

**Synonyms:** CAP-D2; CNAP1; hCAP-D2; MCPH21

Components: NCAPD2 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 9918)

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

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

**Summary:** Regulatory subunit of the condensin complex, a complex required for conversion of

interphase chromatin into mitotic-like condense chromosomes. The condensin complex

probably introduces positive supercoils into relaxed DNA in the presence of type I

topoisomerases and converts nicked DNA into positive knotted forms in the presence of type

II topoisomerases. May target the condensin complex to DNA via its C-terminal domain

(PubMed:11136719). May promote the resolution of double-strand DNA catenanes

(intertwines) between sister chromatids. Condensin-mediated compaction likely increases tension in catenated sister chromatids, providing directionality for type II topoisomerase-mediated strand exchanges toward chromatid decatenation. Required for decatenation of non-centromeric ultrafine DNA bridges during anaphase. Early in neurogenesis, may play an essential role to ensure accurate mitotic chromosome condensation in neuron stem cells, ultimately affecting neuron pool and cortex size (PubMed:27737959).[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).