

## **Product datasheet for SR501375**

## OriGene Technologies, Inc.

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## **Ubiad1 Rat siRNA Oligo Duplex (Locus ID 313706)**

**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 001107993</u>

UniProt ID: <u>D3ZG27</u>

Synonyms: RGD1309588

Components: Ubiad1 (Rat) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 313706)

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

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

**Summary:** Prenyltransferase that mediates the formation of menaguinone-4 (MK-4) and coenzyme Q10.

MK-4 is a vitamin K2 isoform required for endothelial cell development. Mediates the conversion of phylloquinone (PK) into MK-4, probably by cleaving the side chain of phylloquinone (PK) to release 2-methyl-1,4-naphthoquinone (menadione; K3) and then prenylating it with geranylgeranyl pyrophosphate (GGPP) to form MK-4. Also plays a role in cardiovascular development independently of MK-4 biosynthesis, by acting as a coenzyme Q10 biosynthetic enzyme: coenzyme Q10, also named ubiquinone, plays an important antioxidant role in the cardiovascular system. Mediates biosynthesis of coenzyme Q10 in the Golgi membrane, leading to protect cardiovascular tissues from NOS3/eNOS-dependent

oxidative stress (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).