



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## DUT Pre-design Chimera RNAi

Catalog # : H00001854-R04

規格 : [ 10 nmol ] [ 20 nmol ]

List All

### Specification

**Product Description:** Homo sapiens dUTP pyrophosphatase (DUT), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA.

**Reactivity:** Human

**Supplied Product:** DEPC water

**Target Refseq:** NM\_001025248

**Target Region:** 3' Untranslated Region (3'UTR)

**Storage Instruction:** Store at -20°C, do not exceed 4 - 5 freeze-thaw cycles to ensure product integrity.

**Note:** Position of the Chimera RNAi.  
The related RNAi products listed below were designed from different accession number but sharing the same RNAi sequence.



### Application Image

RNAi Knockdown

### Publication Reference

- [dsCheck: highly sensitive off-target search software for double-stranded RNA-mediated RNA interference.](#)  
Naito Y, Yamada T, Matsumiya T, Ui-Tei K, Saigo K, Morishita S. *Nucleic Acids Res.* 2005 Jul 1;33(Web Server issue):W589-91.
- [Functional dissection of siRNA sequence by systematic DNA substitution: modified siRNA with a DNA seed arm is a powerful tool for mammalian gene silencing with significantly reduced off-target effect.](#)  
Ui-Tei K, Naito Y, Zenno S, Nishi K, Yamato K, Takahashi F, Juni A, Saigo K. *Nucleic Acids Res.* 2008 Apr;36(7):2136-51. Epub 2008 Feb 11.
- [Guidelines for the selection of highly effective siRNA sequences for mammalian and chick RNA interference.](#)  
Ui-Tei K, Naito Y, Takahashi F, Haraguchi T, Ohki-Hamazaki H, Juni A, Ueda R, Saigo K. *Nucleic Acids Res.* 2004 Feb 9;32(3):936-48. Print 2004.
- [siDirect: highly effective, target-specific siRNA design software for mammalian RNA interference.](#)  
Naito Y, Yamada T, Ui-Tei K, Morishita S, Saigo K. *Nucleic Acids Res.* 2004 Jul 1;32(Web Server issue):W124-9.

### Applications

RNAi Knockdown

### Gene Information

Entrez GeneID: [1854](#)

**Gene Name:** DUT

**Gene Alias:** FLJ20622,dUTPase

**Gene Description:** deoxyuridine triphosphatase

**Omim ID:** [601266](#)

**Gene Ontology:** [Hyperlink](#)

**Gene Summary:** This gene encodes an essential enzyme of nucleotide metabolism. The encoded protein forms a ubiquitous, homotetrameric enzyme that hydrolyzes dUTP to dUMP and pyrophosphate. This reaction serves two cellular purposes: providing a precursor (dUMP) for the synthesis of thymine nucleotides needed for DNA replication, and limiting intracellular pools of dUTP. Elevated levels of dUTP lead to increased incorporation of uracil into DNA, which induces extensive excision repair mediated by uracil glycosylase. This repair process, resulting in the removal and reincorporation of dUTP, is self-defeating and leads to DNA fragmentation and cell death. Alternative splicing of this gene leads to different isoforms that localize to either the mitochondrion or nucleus. A related pseudogene is located on chromosome 19. [provided by RefSeq]

**Other Designations:** dUTP nucleotidohydrolase,dUTP pyrophosphatase,deoxyuridine 5'-triphosphate nucleotidohydrolase

#### Gene Pathway

[Metabolic pathways](#) [Pyrimidine metabolism](#)

#### Related Disease

[DNA Damage](#) [Genetic Predisposition to Disease](#)