

## Product datasheet for **SR422914**

### Ercc6 Mouse siRNA Oligo Duplex (Locus ID 319955)

#### 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:	<a href="#">NM_001081221</a> , <a href="#">NM_177043</a>
UniProt ID:	<a href="#">F8VPZ5</a>
Synonyms:	4732403I04; C130058G22Rik; CSB
Components:	Ercc6 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 319955) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



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**Summary:**

Essential factor involved in transcription-coupled nucleotide excision repair which allows RNA polymerase II-blocking lesions to be rapidly removed from the transcribed strand of active genes (By similarity). Upon DNA-binding, it locally modifies DNA conformation by wrapping the DNA around itself, thereby modifying the interface between stalled RNA polymerase II and DNA (By similarity). It is required for transcription-coupled repair complex formation. It recruits the CSA complex (DCX(ERCC8) complex), nucleotide excision repair proteins and EP300 to the sites of RNA polymerase II-blocking lesions (By similarity). Plays an important role in regulating the choice of the DNA double-strand breaks (DSBs) repair pathway and G2/M checkpoint activation; DNA-dependent ATPase activity is essential for this function (By similarity). Regulates the DNA repair pathway choice by inhibiting non-homologous end joining (NHEJ), thereby promoting the homologous recombination (HR)-mediated repair of DSBs during the S/G2 phases of the cell cycle (By similarity). Mediates the activation of the ATM- and CHEK2-dependent DNA damage responses thus preventing the premature exit from the G2/M checkpoint (By similarity). Acts as a chromatin remodeler at DSBs; DNA-dependent ATPase-dependent activity is essential for this function (By similarity). Remodels chromatin by evicting histones from chromatin flanking DSBs, limiting RIF1 accumulation at DSBs thereby promoting BRCA1-mediated HR (By similarity). Required for stable recruitment of ELOA and CUL5 to DNA damage sites (By similarity). Involved in UV-induced translocation of ERCC8 to the nuclear matrix (By similarity). Essential for neuronal differentiation and neurogenesis; regulates transcription and chromatin remodeling activities required during neurogenesis (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](mailto: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).