

## **Product datasheet for SR414023**

### OriGene Technologies, Inc.

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## Fbxl2 Mouse siRNA Oligo Duplex (Locus ID 72179)

### **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:
 NM 178624

 UniProt ID:
 Q8BH16

**Synonyms:** 2810423A21Rik; Fbl3

Components: Fbxl2 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 72179)

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

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

Summary: Calcium-activated substrate recognition component of the SCF (SKP1-cullin-F-box protein) E3

ubiquitin-protein ligase complex, SCF(FBXL2), which mediates the ubiquitination and

subsequent proteasomal degradation of target proteins. Unlike many F-box proteins, FBXL2 does not seem to target phosphodegron within its substrates but rather calmodulin-binding motifs and is thereby antagonized by calmodulin. This is the case for the cyclins CCND2 and CCND3 which polyubiquitination and subsequent degradation are inhibited by calmodulin. Through CCND2 and CCND3 degradation induces cell-cycle arrest in G(0). SCF(FBXL2) also

mediates PIK3R2 ubiquitination and proteasomal degradation thereby regulating phosphatidylinositol 3-kinase signaling and autophagy (By similarity). PCYT1A

monoubiquitination by SCF(FBXL2) and subsequent degradation regulates synthesis of phosphatidylcholine, which is utilized for formation of membranes and of pulmonary

surfactant (PubMed:21343341).[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).