

## **Product datasheet for SR426803**

### OriGene Technologies, Inc.

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## Arid5a Mouse siRNA Oligo Duplex (Locus ID 214855)

#### **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 001172205, NM 001172206, NM 001290726, NM 001290727, NM 145996, NR 033310

UniProt ID: Q3U108

Synonyms: D430024K22Rik; Mrf1

Components: Arid5a (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 214855)

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

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



#### Summary:

DNA-binding protein that may regulate transcription and act as a repressor by binding to ATrich stretches in the promoter region of target genes (By similarity). May positively regulate chondrocyte-specific transcription such as of COL2A1 in collaboration with SOX9 and positively regulate histone H3 acetylation at chondrocyte-specific genes. May stimulate earlystage chondrocyte differentiation and inhibit later stage differention (PubMed:21346191). Can repress ESR1-mediated transcriptional activation; proposed to act as corepressor for selective nuclear hormone receptors (By similarity). As RNA-binding protein involved in the regulation of inflammatory response by stabilizing selective inflammation-related mRNAs, such as IL6, STAT3 and TBX21. Binds to stem loop structures located in the 3' UTRs of IL6, STAT3 and TBX21 mRNAs; at least for STAT3 prevents binding of ZC3H12A to the mRNA stem loop structure thus inhibiting its degradation activity. Contributes to elevated IL6 levels possibly implicated in autoimmunity processes. IL6-dependent stabilization of STAT3 mRNA may promote differentiation of naive CD4+ T-cells into T-helper Th17 cells (PubMed:23676272, PubMed:27022145). In CD4+ T-cells may also inhibit RORC-induced Th17 cell differentiation independently of IL6 signaling (PubMed:24782182). Stabilization of TBX21 mRNA contributes to elevated interferon-gamma secretion in Th1 cells possibly implicated in the establishment of septic shock (PubMed:27671645).[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).