

# Product datasheet for SR426376

## Zfp36 Mouse siRNA Oligo Duplex (Locus ID 22695)

## **Product data:**

### OriGene Technologies, Inc.

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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 011756</u>
UniProt ID:	<u>P22893</u>
Synonyms:	Gos24; Nup475; Tis11; TIS11D; TISII; Ttp; Zfp-36
Components:	Zfp36 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 22695) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml
Summary:	<ul> <li>Zinc-finger RNA-binding protein that destabilizes numerous cytoplasmic AU-rich element (ARE)-containing mRNA transcripts by promoting their poly(A) tail removal or deadenylation, and hence provide a mechanism for attenuating protein synthesis (PubMed:10330172, PubMed:10706852, PubMed:10805719, PubMed:15014438, PubMed:15187092, PubMed:15634918, PubMed:17030620, PubMed:19188452, PubMed:20595389, PubMed:21078877, PubMed:22701344, PubMed:27193233). Acts as an 3'-untranslated region (UTR) ARE mRNA-binding adapter protein to communicate signaling events to the mRNA decay machinery (PubMed:21278420). Recruits deadenylase CNOT7 (and probably the CCR4- NOT complex) via association with CNOT1, and hence promotes ARE-mediated mRNA deadenylation (PubMed:21278420). Functions also by recruiting components of the cytoplasmic RNA decay machinery to the bound ARE-containing mRNAs (PubMed:21278420). Self regulates by destabilizing its own mRNA (PubMed:15187092, PubMed:17288565). Binds to 3' UTR ARE of numerous mRNAs and of its own mRNA (PubMed:11533235, PubMed:15187092, PubMed:16508014, PubMed:17288565, PubMed:17971298, PubMed:20595389, PubMed:21078877, PubMed:21278420, PubMed:22701344, PubMed:27193233). Plays a role in anti-inflammatory responses: suppresses tumor necrosis</li> </ul>



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factor (TNF)-alpha production by stimulating ARE-mediated TNF-alpha mRNA decay and several other inflammatory ARE-containing mRNAs in interferon (IFN)- and/or lipopolysaccharide (LPS)-induced macrophages (PubMed:8630730, PubMed:9703499, PubMed:15014438, PubMed:16514065). Plays also a role in the regulation of dendritic cell maturation at the post-transcriptional level, and hence operates as part of a negative feedback loop to limit the inflammatory response (By similarity). Promotes ARE-mediated mRNA decay of hypoxia-inducible factor HIF1A mRNA during the response of endothelial cells to hypoxia (By similarity). Positively regulates early adipogenesis of preadipocytes by promoting ARE-mediated mRNA decay of immediate early genes (IEGs) (PubMed:22701344). Negatively regulates hematopoietic/erythroid cell differentiation by promoting ARE-mediated mRNA decay of the transcription factor STAT5B mRNA (By similarity). Plays a role in maintaining skeletal muscle satellite cell quiescence by promoting ARE-mediated mRNA decay of the myogenic determination factor MYOD1 mRNA (PubMed:25815583). Associates also with and regulates the expression of non-ARE-containing target mRNAs at the posttranscriptional level, such as MHC class I mRNAs (By similarity). Participates in association with argonaute RISC catalytic components in the ARE-mediated mRNA decay mechanism; assists microRNA (miRNA) targeting ARE-containing mRNAs (By similarity). May also play a role in the regulation of cytoplasmic mRNA decapping; enhances decapping of AREcontaining RNAs, in vitro (By similarity). Involved in the delivery of target ARE-mRNAs to processing bodies (PBs) (By similarity). In addition to its cytosolic mRNA-decay function, affects nuclear pre-mRNA processing (PubMed:22844456). Negatively regulates nuclear poly(A)-binding protein PABPN1-stimulated polyadenylation activity on ARE-containing premRNA during LPS-stimulated macrophages (PubMed:22844456). Also involved in the regulation of stress granule (SG) and P-body (PB) formation and fusion (PubMed:15967811). Plays a role in the regulation of keratinocyte proliferation, differentiation and apoptosis (By similarity). Plays a role as a tumor suppressor by inhibiting cell proliferation in breast cancer cells (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).

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