

## **Product datasheet for TR500733**

## **Cidec Mouse shRNA Plasmid (Locus ID 14311)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Cidec Mouse shRNA Plasmid (Locus ID 14311)

**Locus ID:** 14311

**Synonyms:** CIDE-3; Fsp27

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Cidec - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

14311). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: BC099676, NM 001301295, NM 178373, NM 178373.1, NM 178373.2, NM 178373.3,

NM 001301295.1

UniProt ID: P56198

Summary: Binds to lipid droplets and regulates their enlargement, thereby restricting lipolysis and

favoring storage. At focal contact sites between lipid droplets, promotes directional net neutral lipid transfer from the smaller to larger lipid droplets. The transfer direction may be driven by the internal pressure difference between the contacting lipid droplet pair. Its role in neutral lipid transfer and lipid droplet enlargement is activated by the interaction with PLIN1. May act as a CEBPB coactivator in the white adipose tissue to control the expression of a subset of CEBPB downstream target genes, including SOCS1, SOCS3, TGFB1, TGFBR1, ID2 and XDH. When overexpressed in preadipocytes, induces apoptosis or increases cell susceptibility to apoptosis induced by serum deprivation or TGFB treatment. As mature adipocytes, that express high CIDEC levels, are quite resistant to apoptotic stimuli, the physiological significance of its role in apoptosis is unclear. May play a role in the modulation of the response to osmotic stress by preventing NFAT5 to translocate into the nucleus and activate

its target genes expression.[UniProtKB/Swiss-Prot Function]



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shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, 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 shRNA control (Western Blot data preferred).