

Product datasheet for TR513717

OriGene Technologies, Inc.

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Cdc14b Mouse shRNA Plasmid (Locus ID 218294)

Product data:

Product Type: shRNA Plasmids

Product Name: Cdc14b Mouse shRNA Plasmid (Locus ID 218294)

Locus ID: 218294

Synonyms: 2810432N10Rik; A530086E13Rik; AA472821; Cdc14B1; CDC14B3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Cdc14b - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

218294). 5µg purified plasmid DNA per construct

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

RefSeq: BC049794, BC057357, NM 001122989, NM 172587, NM 172587.1, NM 172587.2,

NM 172587.3, NM 001122989.1

UniProt ID: Q6PFY9

Summary: Dual-specificity phosphatase involved in DNA damage response. Essential regulator of the G2

DNA damage checkpoint: following DNA damage, translocates to the nucleus and

dephosphorylates FZR1/CDH1, a key activator of the anaphase promoting complex/cyclosome (APC/C). Dephosphorylates SIRT2 around early anaphase.

Dephosphorylation of FZR1/CDH1 activates the APC/C, leading to the ubiquitination of PLK1, preventing entry into mitosis. Preferentially dephosphorylates proteins modified by proline-

directed kinases (By similarity).[UniProtKB/Swiss-Prot Function]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





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).