

Product datasheet for **TR706268**

Cdc14a Rat shRNA Plasmid (Locus ID 310806)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Cdc14a Rat shRNA Plasmid (Locus ID 310806)
Locus ID:	310806
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cdc14a - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 310806). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001107718 , NM_001134856 , NM_001107718.1 , NM_001107718.2 , NM_001134856.1 , BC161876
Summary:	The protein encoded by this gene is a dual-specificity phosphatase that preferentially dephosphorylates cyclin dependent kinase substrates to regulate the cell cycle. In human cell lines, this protein localizes to interphase chromosomes, and depletion of the transcript results in centrosome separation and cytokinesis defects. In mouse, the protein localizes to the nucleus of prophase I arrested oocytes and then becomes dispersed in meiotically competent oocytes. Knockdown of the protein delays exit from metaphase I and results in eggs with chromosomal abnormalities and elevated aneuploidy, demonstrating a function in regulation of meiosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2015]
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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**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).