

## **Product datasheet for TL314142**

## OriGene Technologies, Inc.

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## Cyclin A1 (CCNA1) Human shRNA Plasmid Kit (Locus ID 8900)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Cyclin A1 (CCNA1) Human shRNA Plasmid Kit (Locus ID 8900)

Locus ID: 8900 Synonyms: CT146

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

CCNA1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 8900).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001111045, NM 001111046, NM 001111047, NM 003914, NM 003914.1, NM 003914.2,

NM 003914.3, NM 001111046.1, NM 001111047.1, NM 001111045.1, BC036346, BC035479,

NM 003914.4

UniProt ID: P78396

**Summary:** The protein encoded by this gene belongs to the highly conserved cyclin family, whose

members are characterized by a dramatic periodicity in protein abundance through the cell

cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct

expression and degradation patterns which contribute to the temporal coordination of each mitotic event. The cyclin encoded by this gene was shown to be expressed in testis and brain, as well as in several leukemic cell lines, and is thought to primarily function in the control of the germline meiotic cell cycle. This cyclin binds both CDK2 and CDC2 kinases, which give two

distinct kinase activities, one appearing in S phase, the other in G2, and thus regulate separate functions in cell cycle. This cyclin was found to bind to important cell cycle

regulators, such as Rb family proteins, transcription factor E2F-1, and the p21 family proteins.

Multiple transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, Jul 2008]





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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).