

#### OriGene Technologies, Inc.

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# Product datasheet for TR314022

## p27 KIP 1 (CDKN1B) Human shRNA Plasmid Kit (Locus ID 1027)

### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	p27 KIP 1 (CDKN1B) Human shRNA Plasmid Kit (Locus ID 1027)
Locus ID:	1027
Synonyms:	CDKN4; KIP1; MEN1B; MEN4; P27KIP1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CDKN1B - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1027). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 004064, NM 004064.1, NM 004064.2, NM 004064.3, NM 004064.4, BC001971, BC001971, NM 004064.5</u>
UniProt ID:	<u>P46527</u>
Summary:	This gene encodes a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state. Mutations in this gene are associated with multiple endocrine neoplasia type IV (MEN4). [provided by RefSeq, Apr 2014]
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> .



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#### **GRIGENE** p27 KIP 1 (CDKN1B) Human shRNA Plasmid Kit (Locus ID 1027) – TR314022

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).

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