

Product datasheet for TR513724

Cdkn1b Mouse shRNA Plasmid (Locus ID 12576)

Product data:

Product Type: shRNA Plasmids

Product Name: Cdkn1b Mouse shRNA Plasmid (Locus ID 12576)

Locus ID: 12576

Synonyms: AA408329; Al843786; Kip1; p27; p27Kip1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Cdkn1b - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

12576). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC014296, NM 009875, NM 009875.1, NM 009875.2, NM 009875.3, NM 009875.4</u>

UniProt ID: P46414

Summary: Important regulator of cell cycle progression (PubMed:8033213, PubMed:12972555). Inhibits

the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (By similarity). Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2 complexes (PubMed:8033213). Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of CCND1-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its

phosphorylation state and/or stoichometry.[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>.



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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).