

## Product datasheet for **TF320295**

### CDK6 Human shRNA Plasmid Kit (Locus ID 1021)

#### Product data:

<b>Product Type:</b>	shRNA Plasmids
<b>Locus ID:</b>	1021
<b>Synonyms:</b>	MCPH12; PLSTIRE
<b>Vector:</b>	pRFP-C-RS (TR30014)
<b>E. coli Selection:</b>	Chloramphenicol (34 ug/ml)
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	CDK6 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector (Gene ID = 1021). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
<b>RefSeq:</b>	<a href="#">BC027989</a> , <a href="#">NM_001145306</a> , <a href="#">NM_001259</a> , <a href="#">NM_001259.1</a> , <a href="#">NM_001259.2</a> , <a href="#">NM_001259.3</a> , <a href="#">NM_001259.4</a> , <a href="#">NM_001259.5</a> , <a href="#">NM_001259.6</a> , <a href="#">NM_001145306.1</a> , <a href="#">BC052264</a> , <a href="#">BC012914</a> , <a href="#">BC063591</a> , <a href="#">BC065026</a> , <a href="#">BM542578</a> , <a href="#">BM542629</a> , <a href="#">BM542736</a> , <a href="#">BM905472</a> , <a href="#">BM978533</a> , <a href="#">NM_001145306.2</a> , <a href="#">NM_001259.8</a>
<b>UniProt ID:</b>	<a href="#">Q00534</a>
<b>Summary:</b>	The protein encoded by this gene is a member of the CMGC family of serine/threonine protein kinases. This kinase is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression and G1/S transition. The activity of this kinase first appears in mid-G1 phase, which is controlled by the regulatory subunits including D-type cyclins and members of INK4 family of CDK inhibitors. This kinase, as well as CDK4, has been shown to phosphorylate, and thus regulate the activity of, tumor suppressor protein Rb. Altered expression of this gene has been observed in multiple human cancers. A mutation in this gene resulting in reduced cell proliferation, and impaired cell motility and polarity, and has been identified in patients with primary microcephaly. [provided by RefSeq, Aug 2017]



**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](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**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](mailto: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).