

## Product datasheet for **TR320302**

### Chk1 (CHEK1) Human shRNA Plasmid Kit (Locus ID 1111)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Chk1 (CHEK1) Human shRNA Plasmid Kit (Locus ID 1111)
Locus ID:	1111
Synonyms:	CHK1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CHEK1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1111). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001114121</a> , <a href="#">NM_001114122</a> , <a href="#">NM_001244846</a> , <a href="#">NM_001274</a> , <a href="#">NM_001330427</a> , <a href="#">NM_001330428</a> , <a href="#">NR_045204</a> , <a href="#">NR_045205</a> , <a href="#">NM_001274.1</a> , <a href="#">NM_001274.3</a> , <a href="#">NM_001274.4</a> , <a href="#">NM_001274.5</a> , <a href="#">NM_001114122.1</a> , <a href="#">NM_001114122.2</a> , <a href="#">NM_001114121.1</a> , <a href="#">NM_001114121.2</a> , <a href="#">NM_001244846.1</a> , <a href="#">BC017575</a> , <a href="#">BC017575.1</a> , <a href="#">BC004202</a> , <a href="#">BM455102</a>
UniProt ID:	<a href="#">O14757</a>
Summary:	The protein encoded by this gene belongs to the Ser/Thr protein kinase family. It is required for checkpoint mediated cell cycle arrest in response to DNA damage or the presence of unreplicated DNA. This protein acts to integrate signals from ATM and ATR, two cell cycle proteins involved in DNA damage responses, that also associate with chromatin in meiotic prophase I. Phosphorylation of CDC25A protein phosphatase by this protein is required for cells to delay cell cycle progression in response to double-strand DNA breaks. Several alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Oct 2011]
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="#">custom shRNA service</a> .



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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](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).