

## Product datasheet for **TR314045**

### CDC45L (CDC45) Human shRNA Plasmid Kit (Locus ID 8318)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	CDC45L (CDC45) Human shRNA Plasmid Kit (Locus ID 8318)
Locus ID:	8318
Synonyms:	CDC45L; CDC45L2; MGORS7; PORC-PI-1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CDC45 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 8318). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001178010</a> , <a href="#">NM_001178011</a> , <a href="#">NM_003504</a> , <a href="#">NM_003504.1</a> , <a href="#">NM_003504.2</a> , <a href="#">NM_003504.3</a> , <a href="#">NM_003504.4</a> , <a href="#">NM_001178011.1</a> , <a href="#">NM_001178011.2</a> , <a href="#">NM_001178010.1</a> , <a href="#">NM_001178010.2</a> , <a href="#">BC006232</a> , <a href="#">BC006232.2</a> , <a href="#">BC010022</a> , <a href="#">BM751026</a> , <a href="#">NM_001369291</a> , <a href="#">NR_161281</a> , <a href="#">NM_003504.5</a>
UniProt ID:	<a href="#">O75419</a>
Summary:	The protein encoded by this gene was identified by its strong similarity with <i>Saccharomyces cerevisiae</i> Cdc45, an essential protein required to the initiation of DNA replication. Cdc45 is a member of the highly conserved multiprotein complex including Cdc6/Cdc18, the minichromosome maintenance proteins (MCMs) and DNA polymerase, which is important for early steps of DNA replication in eukaryotes. This protein has been shown to interact with MCM7 and DNA polymerase alpha. Studies of the similar gene in <i>Xenopus</i> suggested that this protein play a pivotal role in the loading of DNA polymerase alpha onto chromatin. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]
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> .



[View online »](#)

**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).