

## Product datasheet for **TR311541**

### MCM3 Human shRNA Plasmid Kit (Locus ID 4172)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	MCM3 Human shRNA Plasmid Kit (Locus ID 4172)
Locus ID:	4172
Synonyms:	HCC5; P1-MCM3; P1.h; RLF3
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	MCM3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 4172). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001270472</a> , <a href="#">NM_002388</a> , <a href="#">NM_002388.1</a> , <a href="#">NM_002388.2</a> , <a href="#">NM_002388.3</a> , <a href="#">NM_002388.4</a> , <a href="#">NM_001270472.1</a> , <a href="#">BC001626</a> , <a href="#">BC001626.1</a> , <a href="#">BC003509</a> , <a href="#">NR_158966</a> , <a href="#">NM_001366369</a> , <a href="#">NM_001366371</a> , <a href="#">NM_001366375</a> , <a href="#">NR_158964</a> , <a href="#">NM_001366370</a> , <a href="#">NM_001366372</a> , <a href="#">NM_001366373</a> , <a href="#">NM_001366374</a> , <a href="#">NR_158963</a> , <a href="#">NR_158965</a> , <a href="#">NM_002388.6</a>
UniProt ID:	<a href="#">P25205</a>
Summary:	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein is a subunit of the protein complex that consists of MCM2-7. It has been shown to interact directly with MCM5/CDC46. This protein also interacts with and is acetylated by MCM3AP, a chromatin-associated acetyltransferase. The acetylation of this protein inhibits the initiation of DNA replication and cell cycle progression. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2018]
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).