

## Product datasheet for **TR311538**

### MCM6 Human shRNA Plasmid Kit (Locus ID 4175)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	MCM6 Human shRNA Plasmid Kit (Locus ID 4175)
Locus ID:	4175
Synonyms:	MCG40308; Mis5; P105MCM
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	MCM6 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 4175). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_005915</a> , <a href="#">NM_005915.2</a> , <a href="#">NM_005915.3</a> , <a href="#">NM_005915.4</a> , <a href="#">NM_005915.5</a> , <a href="#">BC032374</a> , <a href="#">BC032374.1</a> , <a href="#">BC008774</a> , <a href="#">BC020268</a>
UniProt ID:	<a href="#">Q14566</a>
Summary:	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the 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. The MCM complex consisting of this protein and MCM2, 4 and 7 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. The phosphorylation of the complex by CDC2 kinase reduces the helicase activity, suggesting a role in the regulation of DNA replication. Single nucleotide polymorphisms in the intron regions of this gene are associated with differential transcriptional activation of the promoter of the neighboring lactase gene and, thereby, influence lactose intolerance in early adulthood. [provided by RefSeq, May 2012]
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).