

## Product datasheet for TR503030

## Fmn2 Mouse shRNA Plasmid (Locus ID 54418)

## **Product data:**

## OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Fmn2 Mouse shRNA Plasmid (Locus ID 54418)
Locus ID:	54418
Synonyms:	AU024104
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Fmn2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 54418). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC094606, NM_019445, NM_019445.1, NM_019445.2, BM228488</u>
UniProt ID:	<u>Q9JL04</u>
Summary:	Actin-binding protein that is involved in actin cytoskeleton assembly and reorganization (PubMed:18848445, PubMed:21620703). Acts as an actin nucleation factor and promotes assembly of actin filaments together with SPIRE1 and SPIRE2 (PubMed:18848445, PubMed:21620703). Involved in intracellular vesicle transport along actin fibers, providing a novel link between actin cytoskeleton dynamics and intracellular transport (PubMed:21983562). Required for asymmetric spindle positioning, asymmetric oocyte division and polar body extrusion during female germ cell meiosis (PubMed:12447394, PubMed:18848445, PubMed:19062278, PubMed:21620703). Plays a role in responses to DNA damage, cellular stress and hypoxia by protecting CDKN1A against degradation, and thereby plays a role in stress-induced cell cycle arrest (By similarity). Also acts in the nucleus: together with SPIRE1 and SPIRE2, promotes assembly of nuclear actin filaments in response to DNA damage in order to facilitate movement of chromatin and repair factors after DNA damage (By similarity). Protects cells against apoptosis by protecting CDKN1A against degradation (By



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similarity).[UniProtKB/Swiss-Prot Function]

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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 <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .
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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

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