

Product datasheet for **TR304361**

GFM2 Human shRNA Plasmid Kit (Locus ID 84340)

Product data:

Product Type:	shRNA Plasmids
Product Name:	GFM2 Human shRNA Plasmid Kit (Locus ID 84340)
Locus ID:	84340
Synonyms:	EF-G2mt; EFG2; hEFG2; mEF-G 2; MRRF2; MST027; MSTP027; RRF; RRF2; RRF2mt
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	GFM2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 84340). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM_001281302</u> , <u>NM_032380</u> , <u>NM_170681</u> , <u>NM_170691</u> , <u>NR_104006</u> , <u>NM_032380.1</u> , <u>NM_032380.2</u> , <u>NM_032380.3</u> , <u>NM_032380.4</u> , <u>NM_170681.1</u> , <u>NM_170681.2</u> , <u>NM_170691.1</u> , <u>NM_170691.2</u> , <u>NM_001281302.1</u> , <u>BC030612</u> , <u>BC030612.1</u> , <u>BC015712</u> , <u>NM_170691.3</u> , <u>NM_001281302.2</u>
UniProt ID:	<u>Q969S9</u>
Summary:	Eukaryotes contain two protein translational systems, one in the cytoplasm and one in the mitochondria. Mitochondrial translation is crucial for maintaining mitochondrial function and mutations in this system lead to a breakdown in the respiratory chain-oxidative phosphorylation system and to impaired maintenance of mitochondrial DNA. This gene encodes one of the mitochondrial translation elongation factors, which is a GTPase that plays a role at the termination of mitochondrial translation by mediating the disassembly of ribosomes from messenger RNA . Its role in the regulation of normal mitochondrial function and in disease states attributed to mitochondrial dysfunction is not known. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .


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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).