

## Product datasheet for **TR518022**

### Mfhas1 Mouse shRNA Plasmid (Locus ID 52065)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Mfhas1 Mouse shRNA Plasmid (Locus ID 52065)
Locus ID:	52065
Synonyms:	2310066G09Rik; D8Ertd91e
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Mfhas1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 52065). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001081279</a> , <a href="#">NM_001081279.1</a> , <a href="#">BC082308</a> , <a href="#">NM_001364259</a> , <a href="#">NM_001081279.2</a>
UniProt ID:	<a href="#">Q3V1N1</a>
Summary:	Probable GTP-binding protein (By similarity). Functions in innate immunity and more specifically the inflammatory response as a regulator of the Toll-like receptor TLR2 and TLR4 signaling pathways (PubMed:20616063, PubMed:26599367). Negatively regulates the part of the TLR4 signaling pathway that leads to the activation of the transcription factor AP-1. By retaining the phosphatase complex PP2A into the cytoplasm, prevents the dephosphorylation of the AP-1 subunit JUN which is required for proper activation of the transcription factor (By similarity). Both inhibits and activates the TLR2-dependent signaling pathway (PubMed:26599367). Positively regulates the TLR2 signaling pathway to activate specifically the downstream p38 and JNK MAP kinases and promote the polarization of macrophages toward the pro-inflammatory M1 phenotype. It may also play a role in the regulation of inflammation induced by high glucose through the PKB/AKT signaling pathway. Also involved in erythrocyte differentiation through activation of the ERK1/ERK2 signaling pathway (By similarity).[UniProtKB/Swiss-Prot Function]
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).