

Product datasheet for **TR517015**

Usf1 Mouse shRNA Plasmid (Locus ID 22278)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Usf1 Mouse shRNA Plasmid (Locus ID 22278)
Locus ID:	22278
Synonyms:	bHLHb1; bHLHb11
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Usf1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 22278). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC049784 , NM_009480 , NM_009480.1 , NM_009480.2 , NM_009480.3 , BC049784.1
UniProt ID:	Q61069
Summary:	This protein encoded by this gene is a member of the basic-Helix-Hoop-Helix-Leucine zipper (bHLH-LZ) family and encodes a protein that can act as a transcription factor. Studies indicate that the basic region interacts with DNA at E-Box motifs, while the helix-loop-helix and leucine zipper domains are involved in dimerization with different partners. This protein is involved in a wide array of biological pathways, including cell cycle regulation, immune response, and responses to ultraviolet radiation. Mice lacking most of the coding exons of this gene often lacked both whiskers and nasal fur, and were prone to epileptic seizures, while mice lacking both this gene and another family member, Usf2, displayed embryonic lethality (PMID:9520440). Mutations in the human ortholog of this gene have been associated with Familial Combined Hyperlipidemia (FCHL) in humans. Pseudogenes of this gene are found on chromosome 11 and the X chromosome. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2015]
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 .



[View online »](#)

**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).