

Product datasheet for TR514930

OriGene Technologies, Inc.

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Ufl1 Mouse shRNA Plasmid (Locus ID 67490)

Product data:

Product Type: shRNA Plasmids

Product Name: Ufl1 Mouse shRNA Plasmid (Locus ID 67490)

Locus ID: 67490

Synonyms: 1810074P20Rik; Al429228; Kiaa0776; Maxer; mKlAA0776; Rcad

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Ufl1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

67490). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: BC132195, NM 026194, NM 001355512, NM 026194.1, NM 026194.2, NM 026194.3,

NM 026194.4, BC058809, BC080203, BC099529, BC138153

UniProt ID: Q8CCJ3

Summary: E3 protein ligase that mediates ufmylation, the covalent attachment of the ubiquitin-like

modifier UFM1 to substrate proteins, a post-translational modification on lysine residues of proteins that may play a crucial role in a number of cellular processes. Mediates DDRGK1 ufmylation and may regulate the proteasomal degradation of DDRGK1 and CDK5RAP3 thereby modulating NF-kappa-B signaling. May also play a role in nuclear receptor-mediated transcription through TRIP4 ufmylation. May play a role in the unfolded protein response, mediating the ufmylation of multiple proteins in response to endoplasmic reticulum stress. Anchors CDK5RAP3 in the cytoplasm, preventing its translocation to the nucleus which allows

expression of the CCND1 cyclin and progression of cells through the G1/S transition.

[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 <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).