

## **Product datasheet for TL507021**

## OriGene Technologies, Inc.

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## U2af1l4 Mouse shRNA Plasmid (Locus ID 233073)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** U2af1l4 Mouse shRNA Plasmid (Locus ID 233073)

**Locus ID:** 233073

**Synonyms:** AA407033; AF419339; AI451269; AW553050; U2af26

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Puromycin

Selection:

Format: Lentiviral plasmids

Components: U2af1l4 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

233073). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC060972</u>, <u>NM 170760</u>, <u>NM 170760.1</u>, <u>NM 170760.2</u>, <u>NM 170760.3</u>, <u>BC051477</u>

UniProt ID: Q8BGJ9

**Summary:** RNA-binding protein that function as a pre-mRNA splicing factor. Plays a critical role in both

constitutive and enhancer-dependent splicing by mediating protein-protein interactions and protein-RNA interactions required for accurate 3'-splice site selection. It can functionally substitute for U2AF1 in constitutive splicing and enhancer-dependent splicing. Acts by

enhancing the binding of U2AF2 to weak pyrimidine tracts. Also participates in the regulation of alternative pre-mRNA splicing. Activates exon 5 skipping of PTPRC during T-cell activation; an event reversed by GFI1. Binds to RNA at the AG dinucleotide at the 3'-splice site. Shows a preference for AGC or AGA (PubMed:11739736, PubMed:16819553, PubMed:18460468). Alternative splicing of U2AF1L4 may play a role in connecting the circadian rhythm to changing external cues: may provide a circadian buffering system in central and periphery clocks that allows synchronized adaption to clock-resetting stimuli in order to prevent potentially pathogenic desynchronization (PubMed:24837677).[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).