

## Product datasheet for TL307061V

#### OriGene Technologies, Inc.

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### LYAR Human shRNA Lentiviral Particle (Locus ID 55646)

#### **Product data:**

**Product Type:** shRNA Lentiviral Particles

**Product Name:** LYAR Human shRNA Lentiviral Particle (Locus ID 55646)

**Locus ID:** 55646

Synonyms: ZC2HC2; ZLYAR

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

**Components:** LYAR - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 001145725, NM 017816, NM 017816.1, NM 017816.2, NM 001145725.1, BC015796,

BC015796.2, NM 017816.3

UniProt ID: Q9NX58

**Summary:** Plays a role in the maintenance of the appropriate processing of 47S/45S pre-rRNA to

32S/30S pre-rRNAs and their subsequent processing to produce 18S and 28S rRNAs (PubMed:24495227). Also acts at the level of transcription regulation. Along with PRMT5,

binds the gamma-globin (HBG1/HBG2) promoter and represses its expression

(PubMed:25092918). In neuroblastoma cells, may also repress the expression of oxidative stress genes, including CHAC1, HMOX1, SLC7A11, ULBP1 and SNORD41 that encodes a small nucleolar RNA (PubMed:28686580). Preferentially binds to a DNA motif containing 5'-GGTTAT-3' (PubMed:25092918). Stimulates phagocytosis of photoreceptor outer segments by retinal pigment epithelial cells (By similarity). Prevents nucleolin/NCL self-cleavage, maintaining a normal steady-state level of NCL protein in undifferentiated embryonic stem cells (ESCs), which in turn is essential for ESC self-renewal (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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



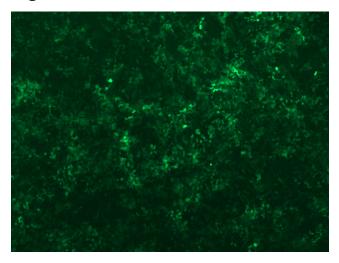


#### Performance Guaranteed:

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.

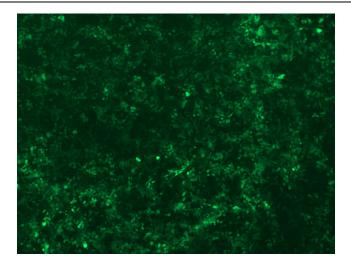
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

# **Product images:**

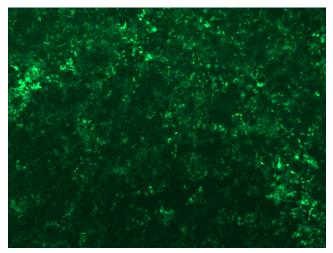


GFP signal was observed under microscope at 48 hours after transduction of TL307061A virus into HEK293 cells. TL307061A virus was prepared using lenti-shRNA TL307061A and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of TL307061B virus into HEK293 cells. TL307061B virus was prepared using lenti-shRNA TL307061B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL307061C] virus into HEK293 cells. [TL307061C] virus was prepared using lenti-shRNA [TL307061C] and [TR30037] packaging kit.