

Product datasheet for TL314613V

OriGene Technologies, Inc.

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ATF6 Human shRNA Lentiviral Particle (Locus ID 22926)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: ATF6 Human shRNA Lentiviral Particle (Locus ID 22926)

Locus ID: 22926

Synonyms: ACHM7; ATF6A

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: ATF6 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: NM 007348, NM 007348.1, NM 007348.2, NM 007348.3, BC014969, BC071997, BC166676,

BM683233, NM 007348.4

UniProt ID: P18850

Summary: This gene encodes a transcription factor that activates target genes for the unfolded protein

response (UPR) during endoplasmic reticulum (ER) stress. Although it is a transcription factor, this protein is unusual in that it is synthesized as a transmembrane protein that is embedded in the ER. It functions as an ER stress sensor/transducer, and following ER stress-induced proteolysis, it functions as a nuclear transcription factor via a cis-acting ER stress response element (ERSE) that is present in the promoters of genes encoding ER chaperones. This protein has been identified as a survival factor for quiescent but not proliferative squamous carcinoma cells. There have been conflicting reports about the association of polymorphisms in this gene with diabetes in different populations, but another polymorphism has been associated with increased plasma cholesterol levels. This gene is also thought to be a

potential therapeutic target for cystic fibrosis. [provided by RefSeq, Aug 2011]

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>.



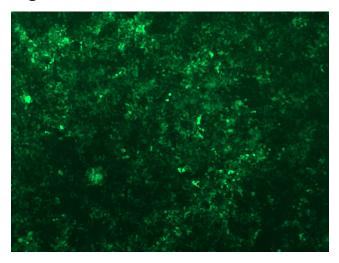


Performance Guaranteed:

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.

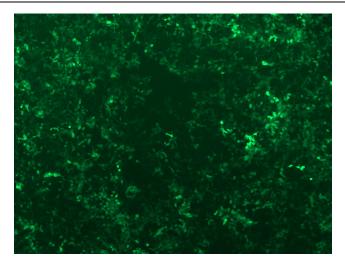
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

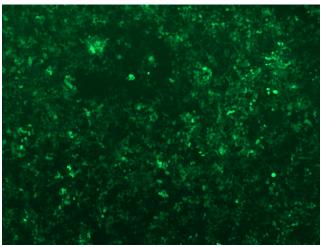


GFP signal was observed under microscope at 48 hours after transduction of TL314613A virus into HEK293 cells. TL314613A virus was prepared using lenti-shRNA TL314613A and [TR30037] packaging kit.

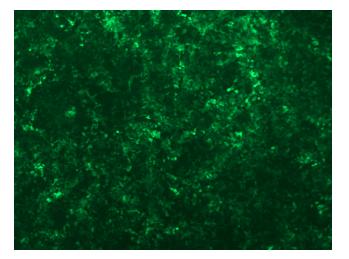




GFP signal was observed under microscope at 48 hours after transduction of TL314613B virus into HEK293 cells. TL314613B virus was prepared using lenti-shRNA TL314613B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL314613C] virus into HEK293 cells. [TL314613C] virus was prepared using lenti-shRNA [TL314613C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL314613D] virus into HEK293 cells. [TL314613D] virus was prepared using lenti-shRNA [TL314613D] and [TR30037] packaging kit.