

## **Product datasheet for TL306524**

#### OriGene Technologies, Inc.

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### ATAD3A Human shRNA Plasmid Kit (Locus ID 55210)

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** ATAD3A Human shRNA Plasmid Kit (Locus ID 55210)

**Locus ID:** 55210

Synonyms: HAYOS; PHRINL

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

**E. coli Selection:** Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: ATAD3A - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

55210). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001170535, NM 001170536, NM 018188, NM 018188.1, NM 018188.2, NM 018188.3,

NM 018188.4, NM 001170536.1, NM 001170536.2, NM 001170535.1, NM 001170535.2, BC007803, BC014101, BC011814, BC033109, BC063607, NM 018188.5, NM 001170535.3

UniProt ID: Q9NVI7

**Summary:** This gene encodes a ubiquitously expressed mitochondrial membrane protein that

contributes to mitochondrial dynamics, nucleoid organization, protein translation, cell growth,

and cholesterol metabolism. This gene is a member of the ATPase family AAA-domain

containing 3 gene family which, in humans, includes two other paralogs. Naturally occurring mutations in this gene are associated with distinct neurological syndromes including Harel-Yoon syndrome. High-level expression of this gene is associated with poor survival in breast

cancer patients. A homozygous knockout of the orthologous gene in mice results in

embryonic lethality at day 7.5 due to growth retardation and defective development of the trophoblast lineage. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Feb 2017]

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).