

## **Product datasheet for TL303531**

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## LIAS Human shRNA Plasmid Kit (Locus ID 11019)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** LIAS Human shRNA Plasmid Kit (Locus ID 11019)

**Locus ID:** 11019

Synonyms: HGCLAS; HUSSY-01; LAS; LIP1; LS; PDHLD

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

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

**Mammalian Cell** 

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Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** LIAS - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 11019).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001278590, NM 001278591, NM 001278592, NM 006859, NM 194451, NM 006859.1,

NM 006859.2, NM 006859.3, NM 194451.1, NM 194451.2, NM 001278592.1,

NM 001278591.1, NM 001278590.1, BC023635, BC023635.2, BC062751, NM 001363700,

NM 194451.3, NM 001278590.2

UniProt ID: 043766

**Summary:** The protein encoded by this gene belongs to the biotin and lipoic acid synthetases family.

Localized in the mitochondrion, this iron-sulfur enzyme catalyzes the final step in the de novo pathway for the biosynthesis of lipoic acid, a potent antioxidant. The deficient expression of this enzyme has been linked to conditions such as diabetes, atherosclerosis and neonatalonset epilepsy. Alternative splicing occurs at this locus, and several transcript variants

encoding distinct isoforms have been identified. [provided by RefSeq, Aug 2020]

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).