

Product datasheet for TR319925

OriGene Technologies, Inc.

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C6orf57 (SDHAF4) Human shRNA Plasmid Kit (Locus ID 135154)

Product data:

Product Type: shRNA Plasmids

Product Name: C6orf57 (SDHAF4) Human shRNA Plasmid Kit (Locus ID 135154)

Locus ID: 135154

Synonyms: C6orf57; Sdh8

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: SDHAF4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

135154). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC018085</u>, <u>NM 145267</u>, <u>NM 145267.1</u>, <u>NM 145267.2</u>, <u>BC018085.1</u>, <u>BC104649</u>

UniProt ID: Q5VUM1

Summary: Plays an essential role in the assembly of succinate dehydrogenase (SDH), an enzyme

complex (also referred to as respiratory complex II) that is a component of both the tricarboxylic acid (TCA) cycle and the mitochondrial electron transport chain, and which couples the oxidation of succinate to fumarate with the reduction of ubiquinone (coenzyme Q) to ubiquinol (PubMed:24954416). Binds to the flavoprotein subunit SDHA in its FAD-bound form, blocking the generation of excess reactive oxigen species (ROS) and facilitating its assembly with the iron-sulfur protein subunit SDHB into the SDH catalytic dimer (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).