

## **Product datasheet for TL315652**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **STOML2 Human shRNA Plasmid Kit (Locus ID 30968)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** STOML2 Human shRNA Plasmid Kit (Locus ID 30968)

**Locus ID:** 30968

Synonyms: HSPC108; SLP-2

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

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: STOML2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

30968). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001287031, NM 001287032, NM 001287033, NM 013442, NM 013442.1, NM 013442.2,

NM 001287032.1, NM 001287033.1, NM 001287031.1, BC010152, BC010152.2, BC002442,

BC003025, BC014990, NM 013442.3

UniProt ID: Q9U|Z1

**Summary:** Mitochondrial protein that probably regulates the biogenesis and the activity of

mitochondria. Stimulates cardiolipin biosynthesis, binds cardiolipin-enriched membranes where it recruits and stabilizes some proteins including prohibitin and may therefore act in the organization of functional microdomains in mitochondrial membranes. Through regulation of the mitochondrial function may play a role into several biological processes including cell migration, cell proliferation, T-cell activation, calcium homeostasis and cellular response to stress. May play a role in calcium homeostasis through negative regulation of calcium efflux from mitochondria. Required for mitochondrial hyperfusion a pro-survival cellular response to stress which results in increased ATP production by mitochondria. May also regulate the organization of functional domains at the plasma membrane and play a role in T-cell activation through association with the T-cell receptor signaling complex and its

regulation.[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 <a href="techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

**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).