

## **Product datasheet for TL303916**

## **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

## **INSIG1 Human shRNA Plasmid Kit (Locus ID 3638)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: INSIG1 Human shRNA Plasmid Kit (Locus ID 3638)

Locus ID: 3638 Synonyms: CL6

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** INSIG1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3638).

5µg purified plasmid DNA per construct

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

RefSeq: NM 005542, NM 198336, NM 198337, NM 001346590, NM 001346591, NM 001346592,

NM 001346593, NM 001346594, NM 005542.1, NM 005542.2, NM 005542.3, NM 005542.4, NM 005542.5, NM 198336.1, NM 198336.2, NM 198336.3, NM 198337.1, NM 198337.3,

BC001880, BC001880.1, BM995866, NM 005542.6

UniProt ID: 015503

**Summary:** This gene encodes an endoplasmic reticulum membrane protein that regulates cholesterol

metabolism, lipogenesis, and glucose homeostasis. The encoded protein has six

transmembrane helices which contain an effector protein binding site. It binds the sterol-sensing domains of sterol regulatory element-binding protein (SREBP) cleavage-activating protein (SCAP) and 3-hydroxy-3-methylglutaryl-coenzyme A reductase (HMG-CoA reductase), and is essential for the sterol-mediated trafficking of these two proteins. It promotes the endoplasmic reticulum retention of SCAP and the ubiquitin-mediated degradation of HMG-CoA reductase. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Oct 2016]

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).