

Product datasheet for TL301413

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

SPHK1 Human shRNA Plasmid Kit (Locus ID 8877)

Product data:

Product Type: shRNA Plasmids

Product Name: SPHK1 Human shRNA Plasmid Kit (Locus ID 8877)

Locus ID: 8877 Synonyms: SPHK

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: SPHK1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 8877).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001142601, NM 001142602, NM 021972, NM 182965, NM 001355139, NM 021972.1,

NM 021972.2, NM 021972.3, NM 182965.1, NM 182965.2, NM 001142602.1,

NM 001142601.1, BC009419, BC009419.1, BC030553, BC008040, BC004112, BC014439,

NM 021972.4

UniProt ID: Q9NYA1

Summary: The protein encoded by this gene catalyzes the phosphorylation of sphingosine to form

sphingosine-1-phosphate (S1P), a lipid mediator with both intra- and extracellular functions. Intracellularly, S1P regulates proliferation and survival, and extracellularly, it is a ligand for cell surface G protein-coupled receptors. This protein, and its product S1P, play a key role in TNF-alpha signaling and the NF-kappa-B activation pathway important in inflammatory, antiapoptotic, and immune processes. Phosphorylation of this protein alters its catalytic activity and promotes its translocation to the plasma membrane. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 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).