

## **Product datasheet for TR300454**

## OriGene Technologies, Inc.

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## WISP1 Human shRNA Plasmid Kit (Locus ID 8840)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** WISP1 Human shRNA Plasmid Kit (Locus ID 8840)

Locus ID: 8840

Synonyms: WISP1; WISP1-OT1; WISP1-UT1; WISP1c; WISP1i; WISP1tc

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: WISP1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

8840). 5µg purified plasmid DNA per construct

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

transcript variants have been identified. [provided by RefSeq, Mar 2011]

RefSeq: NM 001204869, NM 001204870, NM 003882, NM 080838, NR 037944, NM 003882.1,

NM 003882.2, NM 003882.3, NM 080838.1, NM 080838.2, NM 001204870.1, BC074840, BC074840.2, BC074841, NM 001204869.2, NM 001204870.2, NM 003882.4, NM 080838.3

UniProt ID: 095388

Summary: This gene encodes a member of the WNT1 inducible signaling pathway (WISP) protein

subfamily, which belongs to the connective tissue growth factor (CTGF) family. WNT1 is a member of a family of cysteine-rich, glycosylated signaling proteins that mediate diverse developmental processes. The CTGF family members are characterized by four conserved cysteine-rich domains: insulin-like growth factor-binding domain, von Willebrand factor type C module, thrombospondin domain and C-terminal cystine knot-like domain. This gene may be downstream in the WNT1 signaling pathway that is relevant to malignant transformation. It is expressed at a high level in fibroblast cells, and overexpressed in colon tumors. The encoded protein binds to decorin and biglycan, two members of a family of small leucine-rich proteoglycans present in the extracellular matrix of connective tissue, and possibly prevents the inhibitory activity of decorin and biglycan in tumor cell proliferation. It also attenuates p53-mediated apoptosis in response to DNA damage through activation of the Akt kinase. It is 83% identical to the mouse protein at the amino acid level. Multiple alternatively spliced





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

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).