

Product datasheet for TR318727

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VHLL Human shRNA Plasmid Kit (Locus ID 391104)

Product data:

Product Type: shRNA Plasmids

Product Name: VHLL Human shRNA Plasmid Kit (Locus ID 391104)

Locus ID: 391104 VHLP; VLP

Vector: pRS (TR20003)

E. coli Selection: Ampicillin Mammalian Cell Puromycin

Selection:

Format:

Synonyms:

Retroviral plasmids

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

391104). 5µg purified plasmid DNA per construct

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

NM 001004319, NM 001004319.1, NM 001004319.2, BC130596, BC130598, NM 001004319.3 RefSeq:

UniProt ID: Q6RSH7

Von Hippel-Lindau (VHL) tumor suppressor protein is a component of an E3 ubiquitin ligase **Summary:**

> complex that selectively ubiquitinates the alpha subunit of the hypoxia-inducible factor (HIF) transcription factor for proteasome-mediated degradation. Inactivation of VHL causes VHL disease and sporadic kidney cancer. This gene encodes a VHL homolog that lacks one of two key domains necessary for VHL function. This gene may contribute to the regulation of oxygen homeostasis and neovascularization during placenta development. This gene is intronless, and can also be interpreted as a retrotransposed pseudogene of the VHL locus located on chromosome 3. However, the protein is represented in this RefSeq due to evidence in PMID:14757845 that strongly suggests it is translated. The same publication also indicates that this protein binds HIF alpha but fails to recruit the E3 ubiquitin ligase complex,

[provided by RefSeg, Jan 2010]

These shRNA constructs were designed against multiple splice variants at this gene locus. To shRNA Design:

> 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 custom shRNA service.

and it therefore functions as a dominant-negative VHL protein and a protector of HIF alpha.





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).