

Product datasheet for TG300577

OriGene Technologies, Inc.

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Von Hippel Lindau (VHL) Human shRNA Plasmid Kit (Locus ID 7428)

Product data:

Product Type: shRNA Plasmids

Product Name: Von Hippel Lindau (VHL) Human shRNA Plasmid Kit (Locus ID 7428)

Locus ID: 7428

Synonyms: HRCA1; pVHL; RCA1; VHL1

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: VHL - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 7428). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 000551, NM 198156, NM 001354723, NM 198156.1, NM 198156.2, NM 000551.1,

NM 000551.2, NM 000551.3, BC058831, BC058831.1, BC027957, BM564781, NM 000551.4,

NM 198156.3

UniProt ID: P40337

Summary: Von Hippel-Lindau syndrome (VHL) is a dominantly inherited familial cancer syndrome

predisposing to a variety of malignant and benign tumors. A germline mutation of this gene is the basis of familial inheritance of VHL syndrome. The protein encoded by this gene is a component of the protein complex that includes elongin B, elongin C, and cullin-2, and possesses ubiquitin ligase E3 activity. This protein is involved in the ubiquitination and degradation of hypoxia-inducible-factor (HIF), which is a transcription factor that plays a central role in the regulation of gene expression by oxygen. RNA polymerase II subunit POLR2G/RPB7 is also reported to be a target of this protein. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

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).