

# Product datasheet for TR300574

## VKORC1 Human shRNA Plasmid Kit (Locus ID 79001)

## **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	VKORC1 Human shRNA Plasmid Kit (Locus ID 79001)
Locus ID:	79001
Synonyms:	EDTP308; MST134; MST576; VKCFD2; VKOR
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	VKORC1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 79001). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 001311311, NM 024006, NM 206824, NM 024006.2, NM 024006.3, NM 024006.4, NM 024006.5, NM 206824.1, NM 206824.2, BC002911, BC000828, BM663008, NM 024006.6</u>
UniProt ID:	<u>Q9BQB6</u>
Summary:	This gene encodes the catalytic subunit of the vitamin K epoxide reductase complex, which is responsible for the reduction of inactive vitamin K 2,3-epoxide to active vitamin K in the endoplasmic reticulum membrane. Vitamin K is a required co-factor for carboxylation of glutamic acid residues by vitamin K-dependent gamma-carboxylase in blood-clotting enzymes. Allelic variation in this gene is associated with vitamin k-dependent clotting factors combined deficiency of 2, and increased resistance or sensitivity to warfarin, an inhibitor of vitamin K epoxide reductase. Pseudogenes of this gene are located on chromosomes 1 and X. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]
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> .



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### **GRIGENE** VKORC1 Human shRNA Plasmid Kit (Locus ID 79001) – TR300574

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).

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