

Product datasheet for TL300574

OriGene Technologies, Inc.

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VKORC1 Human shRNA Plasmid Kit (Locus ID 79001)

Product data:

Product Type: shRNA Plasmids

Product Name: VKORC1 Human shRNA Plasmid Kit (Locus ID 79001)

Locus ID: 79001

Synonyms: EDTP308; MST134; MST576; VKCFD2; VKOR

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

Mammalian Cell

Puromycin

Selection:

Format: Lentiviral plasmids

Components: VKORC1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

79001). 5µg purified plasmid DNA per construct

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

RefSeq: 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

UniProt ID: Q9BQB6

Summary: This gene encodes the catalytic subunit of the vitamin K epoxide reductase complex, which is

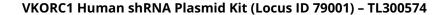
responsible for the reduction of inactive vitamin K 2,3-epoxide to active vitamin K in the endoplasmic reticulum membrane. Vitamin K is a required co-factor for carboxylation of glutamic acid residues by vitamin K-dependent gamma-carboxylase in blood-clotting enzymes. Allelic variation in this gene is 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>.







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).