

Product datasheet for TL302378

OriGene Technologies, Inc.

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POLK Human shRNA Plasmid Kit (Locus ID 51426)

Product data:

Product Type: shRNA Plasmids

Product Name: POLK Human shRNA Plasmid Kit (Locus ID 51426)

Locus ID: 51426

Synonyms: DINB1; DINP; POLQ

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: POLK - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 51426).

5µg purified plasmid DNA per construct

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

RefSeq: NM 016218, NM 001345921, NM 001345922, NR 144315, NM 016218.1, NM 016218.2,

NM 016218.3, BC014955, BC041798, BC050718

UniProt ID: Q9UBT6

Summary: This gene encodes a member of the DNA polymerase type-Y family of proteins. The encoded

protein is a specialized DNA polymerase that catalyzes translesion DNA synthesis, which allows DNA replication in the presence of DNA lesions. Human cell lines lacking a functional copy of this gene exhibit impaired genome integrity and enhanced susceptibility to oxidative damage. Mutations in this gene that impair enzyme activity may be associated with prostate

cancer in human patients. [provided by RefSeq, Sep 2016]

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).