

## **Product datasheet for TL302049**

## OriGene Technologies, Inc.

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## RDH12 Human shRNA Plasmid Kit (Locus ID 145226)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** RDH12 Human shRNA Plasmid Kit (Locus ID 145226)

**Locus ID:** 145226

**Synonyms:** LCA13; RP53; SDR7C2

**Vector:** pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: RDH12 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

145226). 5µg purified plasmid DNA per construct

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

RefSeq: NM 152443, NM 152443.1, NM 152443.2, BC025724

UniProt ID: Q96NR8

**Summary:** The protein encoded by this gene is an NADPH-dependent retinal reductase whose highest

activity is toward 9-cis and all-trans-retinol. The encoded enzyme also plays a role in the metabolism of short-chain aldehydes but does not exhibit steroid dehydrogenase activity. Defects in this gene are a cause of Leber congenital amaurosis type 13 and Retinitis

Pigmentosa 53. [provided by RefSeq, Sep 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 custom shRNA service.







## 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).