

Product datasheet for TL304860V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

KIAA1970 (EARS2) Human shRNA Lentiviral Particle (Locus ID 124454)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: KIAA1970 (EARS2) Human shRNA Lentiviral Particle (Locus ID 124454)

Locus ID: 124454

Synonyms: COXPD12; gluRS; MSE1; mtGlnRS

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: EARS2 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 001083614, NM 001308211, NM 133451, NR 003501, NM 001083614.1, NM 133451.1,

BC020592, BC040013, NM 001083614.2

UniProt ID: Q5|PH6

Summary: This gene encodes a member of the class I family of aminoacyl-tRNA synthetases. These

enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. This protein is encoded by the nuclear genome but is likely to be imported to the mitochondrion where it is thought to catalyze the ligation of glutamate to tRNA

molecules. Mutations in this gene have been associated with combined oxidative phosphorylation deficiency 12 (COXPD12). Alternative splicing results in multiple transcript

variants. [provided by RefSeq, Mar 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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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).