

Product datasheet for TR306931

OriGene Technologies, Inc.

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Alanyl tRNA synthetase 2 (AARS2) Human shRNA Plasmid Kit (Locus ID 57505)

Product data:

Product Type: shRNA Plasmids

Product Name: Alanyl tRNA synthetase 2 (AARS2) Human shRNA Plasmid Kit (Locus ID 57505)

Locus ID: 57505

Synonyms: AARSL; COXPD8; LKENP; MT-ALARS; MTALARS

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: AARS2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

57505). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 020745, NM 020745.1, NM 020745.2, NM 020745.3, BC131728, BC013593, BC021131,

BC033169, BC041026, BC128175

UniProt ID: Q5|TZ9

Summary: The protein encoded by this gene belongs to the class-II aminoacyl-tRNA synthetase family.

Aminoacyl-tRNA synthetases play critical roles in mRNA translation by charging tRNAs with their cognate amino acids. The encoded protein is a mitochondrial enzyme that specifically aminoacylates alanyl-tRNA. Mutations in this gene are a cause of combined oxidative

phosphorylation deficiency 8. [provided by RefSeq, Dec 2011]

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).