

## **Product datasheet for TL315039**

#### OriGene Technologies, Inc.

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### AlaRS (AARS) Human shRNA Plasmid Kit (Locus ID 16)

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** AlaRS (AARS) Human shRNA Plasmid Kit (Locus ID 16)

Locus ID: 16

**Synonyms:** AARS; CMT2N; DEE29; EIEE29

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

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: AARS - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 16). 5µg

purified plasmid DNA per construct

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

RefSeq: NM 001605, NM 001605.1, NM 001605.2, BC011451, BC011451.1, NM 001605.3

UniProt ID: P49588

**Summary:** The human alanyl-tRNA synthetase (AARS) belongs to a family of tRNA synthases, of the class

II enzymes. Class II tRNA synthases evolved early in evolution and are highly conserved. This is reflected by the fact that 498 of the 968-residue polypeptide human AARS shares 41% identity witht the E.coli protein. tRNA synthases are the enzymes that interpret the RNA code

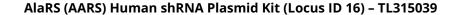
and attach specific aminoacids to the tRNAs that contain the cognate trinucleotide

anticodons. They consist of a catalytic domain which interacts with the amino acid acceptor-T psi C helix of the tRNA, and a second domain which interacts with the rest of the tRNA

structure. [provided by RefSeq, Jul 2008]

**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).