

Product datasheet for TR310021

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QARS Human shRNA Plasmid Kit (Locus ID 5859)

Product data:

Product Type: shRNA Plasmids

Product Name: QARS Human shRNA Plasmid Kit (Locus ID 5859)

Locus ID: 5859

Synonyms: GLNRS; MSCCA; PRO2195; QARS

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

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

5859). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001272073, NM 005051, NR 073590, NM 005051.1, NM 005051.2, NM 001272073.1,

BC000394, BC000394.2, BC001567, BC001772, BC016634, BC029739, BM560535,

NM 001272073.2, NM 005051.3

UniProt ID: P47897

Summary: Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino

acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared

in evolution. In metazoans, 9 aminoacyl-tRNA synthetases specific for glutamine (gln), glutamic acid (glu), and 7 other amino acids are associated within a multienzyme complex. Although present in eukaryotes, glutaminyl-tRNA synthetase (QARS) is absent from many

prokaryotes, mitochondria, and chloroplasts, in which Gln-tRNA(Gln) is formed by

transamidation of the misacylated Glu-tRNA(Gln). Glutaminyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family. Alternative splicing results in multiple transcript

variants. [provided by RefSeq, Jan 2013]

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).