

Product datasheet for TR304168

OriGene Technologies, Inc.

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Translation factor GUF1, mitochondrial (GUF1) Human shRNA Plasmid Kit (Locus ID 60558)

Product data:

Product Type: shRNA Plasmids

Product Name: Translation factor GUF1, mitochondrial (GUF1) Human shRNA Plasmid Kit (Locus ID 60558)

Locus ID: 60558

Synonyms: DEE40; EF-4; EF4; EIEE40

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: GUF1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

60558). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001345867, NM 001345868, NM 001345869, NM 021927, NM 021927.1, NM 021927.2,

BC036768, BC036768.1, BC012338, NM 021927.3

UniProt ID: Q8N442

Summary: This gene encodes a GTPase that triggers back-translocation of the elongating ribosome

during mitochondrial protein synthesis. The protein contains a highly conserved C-terminal domain not found in other GTPases that facilitates tRNA binding. The encoded protein is thought to prevent misincorporation of amino acids in stressful, suboptimal conditions. An allelic variant in this gene has been associated with early infantile epileptic encephalopathy-40. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2016]

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).