

## **Product datasheet for TR319851**

## OriGene Technologies, Inc.

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## **COX7A2 Human shRNA Plasmid Kit (Locus ID 1347)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** COX7A2 Human shRNA Plasmid Kit (Locus ID 1347)

Locus ID: 1347

Synonyms: COX7AL; COX7AL1; COXVIIa-L; COXVIIAL; VIIAL

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

COX7A2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

1347). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001865, NR 029466, NM 001865.1, NM 001865.2, NM 001865.3, BC100852, BC100853,

BC100854, BC101826, BC101828, BC133654, NM 001366292, NM 001366293, NR 158784,

NR 158783, NM 001865.4

UniProt ID: P14406

**Summary:** Cytochrome c oxidase, the terminal component of the mitochondrial respiratory chain,

catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of three catalytic subunits encoded by mitochondrial genes, and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, while the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes polypeptide 2 (liver isoform) of subunit VIIa, with this polypeptide being present in both muscle and non-muscle tissues. In addition to polypeptide 2, subunit VIIa includes polypeptide 1 (muscle isoform), which is present only in muscle tissues, and a related protein, which is present in all tissues. Alternative splicing results in multiple transcript variants. Related pseudogenes have been

identified on chromosomes 4 and 14. [provided by RefSeq, Oct 2009]

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).