

Product datasheet for TL313763

OriGene Technologies, Inc.

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COX6A1 Human shRNA Plasmid Kit (Locus ID 1337)

Product data:

Product Type: shRNA Plasmids

Product Name: COX6A1 Human shRNA Plasmid Kit (Locus ID 1337)

Locus ID: 1337

Synonyms: CMTRID; COX6A; COX6AL

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: COX6A1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 1337).

5µg purified plasmid DNA per construct

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

RefSeq: NM 004373, NM 004373.1, NM 004373.2, NM 004373.3, BC107861, BC107861.1, BC007723,

BC070186, NM 004373.4

UniProt ID: P12074

Summary: Cytochrome c oxidase (COX), the terminal enzyme of the mitochondrial respiratory chain,

catalyzes the electron transfer from reduced cytochrome c to oxygen. It is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in the electron transfer and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes polypeptide 1 (liver isoform) of subunit VIa, and polypeptide 1 is found in all non-muscle tissues. Polypeptide 2 (heart/muscle isoform) of subunit VIa is encoded by a different gene, and is present only in striated muscles. These two polypeptides share 66% amino acid sequence identity. It has been reported that there may be several pseudogenes on chromosomes 1, 6, 7q21, 7q31-32 and 12. However, only one pseudogene (COX6A1P) on chromosome 1p31.1 has been

documented. [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).