

## **Product datasheet for TL314583V**

#### OriGene Technologies, Inc.

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### **ATP5MC1 Human shRNA Lentiviral Particle (Locus ID 516)**

#### **Product data:**

**Product Type:** shRNA Lentiviral Particles

**Product Name:** ATP5MC1 Human shRNA Lentiviral Particle (Locus ID 516)

Locus ID: 516

Synonyms: ATP5A; ATP5G; ATP5G1

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

Format: Lentiviral particles

Components: ATP5G1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1

scramble control), 0.5 ml each, >10^7 TU/ml.

**RefSeq:** NM 001002027, NM 005175, NM 005175.1, NM 005175.2, NM 001002027.1, BC004963,

BC004963.2, NM 005175.3

UniProt ID: P05496

**Summary:** This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase

catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multisubunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene is one of three genes that encode subunit c of the proton channel. Each of the three genes have distinct mitochondrial import sequences but encode the identical mature protein. Alternatively spliced transcript variants encoding the same protein have been identified. [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>.





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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).