

## **Product datasheet for TL509292**

### OriGene Technologies, Inc.

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### Ppargc1a Mouse shRNA Plasmid (Locus ID 19017)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Ppargc1a Mouse shRNA Plasmid (Locus ID 19017)

**Locus ID:** 19017

Synonyms: A830037N07Rik; Gm11133; Pgc; PGC-1; Pgc-1alpha; Pgc1; Pgco1; PPARGC-1-alpha; Ppargc1

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

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Ppargc1a - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

19017). 5µg purified plasmid DNA per construct

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

RefSeq: BC066868, NM 008904, NR 027710, NR 132764, NM 008904.1, NM 008904.2

UniProt ID: 070343

**Summary:** This gene encodes a transcriptional coactivator that induces and coordinates gene

expression regulating mitochondrial biogenesis, respiration, hepatic gluconeogenesis,

thermogenic program in brown fat and muscle fiber-type switching. Mice lacking the encoded protein exhibit reduced thermogenic capacity, hyperactivity and resistance to diet-induced obesity. Mice lacking the encoded protein specifically in the heart exhibit peripartum cardiomyopathy. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Sep 2015]

**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>.

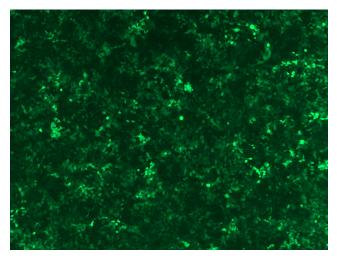


### Performance Guaranteed:

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.

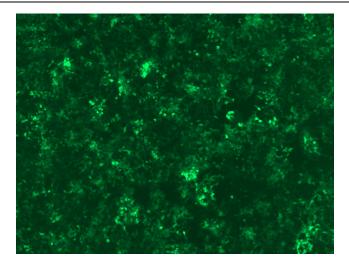
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

# **Product images:**

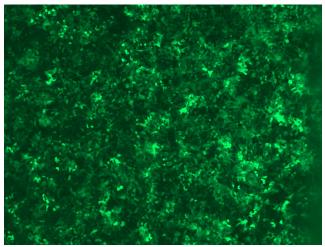


GFP signal was observed under microscope at 48 hours after transduction of TL509292A virus into HEK293 cells. TL509292A virus was prepared using lenti-shRNA TL509292A and [TR30037] packaging kit.

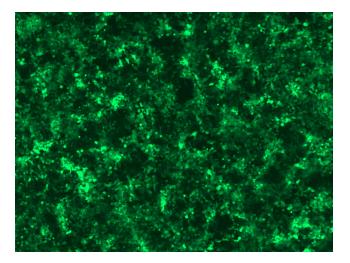




GFP signal was observed under microscope at 48 hours after transduction of TL509292B virus into HEK293 cells. TL509292B virus was prepared using lenti-shRNA TL509292B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL509292C] virus into HEK293 cells. [TL509292C] virus was prepared using lenti-shRNA [TL509292C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL509292D] virus into HEK293 cells. [TL509292D] virus was prepared using lenti-shRNA [TL509292D] and [TR30037] packaging kit.