

Product datasheet for TL506096

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Ppargc1b Mouse shRNA Plasmid (Locus ID 170826)

Product data:

Product Type: shRNA Plasmids

Product Name: Ppargc1b Mouse shRNA Plasmid (Locus ID 170826)

Locus ID: 170826

Synonyms: 4631412G21Rik; Perc

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Ppargc1b - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

170826). 5µg purified plasmid DNA per construct

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

RefSeq: NM 133249, NM 133249.1, NM 133249.2, BC150699, NM 001364996

UniProt ID: Q8VHJ7

Summary: Plays a role of stimulator of transcription factors and nuclear receptors activities. Activates

transcriptional activity of estrogen receptor alpha, nuclear respiratory factor 1 (NRF1) and glucocorticoid receptor in the presence of glucocorticoids. May play a role in constitutive non-adrenergic-mediated mitochondrial biogenesis as suggested by increased basal oxygen consumption and mitochondrial number when overexpressed. May be part of the pathways regulating the elevation of gluconeogenesis, beta-oxidation of fatty acids and ketogenesis during fasting. Stimulates SREBP-mediated lipogenic gene expression in the liver. Induces energy expenditure and antagonizes obesity when overexpressed. Induces also the

expression of mitochondrial genes involved in oxidative metabolism. Induces the expression of PERM1 in the skeletal muscle in an ESRRA-dependent manner. [UniProtKB/Swiss-Prot

Function]

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).