

Product datasheet for TR302354

OriGene Technologies, Inc.

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PGC1 beta (PPARGC1B) Human shRNA Plasmid Kit (Locus ID 133522)

Product data:

Product Type: shRNA Plasmids

Product Name: PGC1 beta (PPARGC1B) Human shRNA Plasmid Kit (Locus ID 133522)

Locus ID: 133522

Synonyms: ERRL1; PERC; PGC-1(beta); PGC1B

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: PPARGC1B - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID

= 133522). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001172698, NM 001172699, NM 133263, NM 133263.1, NM 133263.2, NM 133263.3,

NM 001172699.1, NM 001172698.1, BC026956, BC132971, BC132973, BC144251,

NM 001172698.2

UniProt ID: Q86YN6

Summary: The protein encoded by this gene stimulates the activity of several transcription factors and

nuclear receptors, including estrogen receptor alpha, nuclear respiratory factor 1, and glucocorticoid receptor. The encoded protein may be involved in fat oxidation, non-oxidative glucose metabolism, and the regulation of energy expenditure. This protein is downregulated in prediabetic and type 2 diabetes mellitus patients. Certain allelic variations in this gene increase the risk of the development of obesity. Three transcript variants encoding different

isoforms have been found for this gene. [provided by RefSeq, Mar 2010]

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).