

## **Product datasheet for TR302658**

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## PCB (PC) Human shRNA Plasmid Kit (Locus ID 5091)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** PCB (PC) Human shRNA Plasmid Kit (Locus ID 5091)

Locus ID: 5091 Synonyms: PCB

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

**Components:** PC - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5091).

5µg purified plasmid DNA per construct

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

RefSeq: NM 000920, NM 001040716, NM 022172, NM 022172.1, NM 022172.2, NM 000920.1,

NM 000920.2, NM 000920.3, NM 001040716.1, BC011617, BC011617.2, NM 000920.4,

NM 001040716.2, NM 022172.3

UniProt ID: P11498

Summary: This gene encodes pyruvate carboxylase, which requires biotin and ATP to catalyse the

carboxylation of pyruvate to oxaloacetate. The active enzyme is a homotetramer arranged in a tetrahedron which is located exclusively in the mitochondrial matrix. Pyruvate carboxylase

is involved in gluconeogenesis, lipogenesis, insulin secretion and synthesis of the

neurotransmitter glutamate. Mutations in this gene have been associated with pyruvate carboxylase deficiency. Alternatively spliced transcript variants with different 5' UTRs, but encoding the same protein, have been found for this gene. [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).