

### **Product datasheet for TG320451**

## OriGene Technologies, Inc.

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#### PDK4 Human shRNA Plasmid Kit (Locus ID 5166)

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** PDK4 Human shRNA Plasmid Kit (Locus ID 5166)

Locus ID: 5166

**Vector:** pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

**Components:** PDK4 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 5166).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 002612, NM 002612.1, NM 002612.2, NM 002612.3, BC040239, BC040239.1

UniProt ID: Q16654

**Summary:** This gene is a member of the PDK/BCKDK protein kinase family and encodes a mitochondrial

protein with a histidine kinase domain. This protein is located in the matrix of the

mitrochondria and inhibits the pyruvate dehydrogenase complex by phosphorylating one of its subunits, thereby contributing to the regulation of glucose metabolism. Expression of this gene is regulated by glucocorticoids, retinoic acid and insulin. [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).