

## **Product datasheet for TG320477**

## OriGene Technologies, Inc.

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## PKC zeta (PRKCZ) Human shRNA Plasmid Kit (Locus ID 5590)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: PKC zeta (PRKCZ) Human shRNA Plasmid Kit (Locus ID 5590)

Locus ID: 5590

**Synonyms:** PKC-ZETA; PKC2

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

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

**Components:** PRKCZ - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 5590).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001033581, NM 001033582, NM 001242874, NM 002744, NM 001350803,

NM 001350804, NM 001350805, NM 001350806, NR 146911, NM 001033581.1, NM 002744.1, NM 002744.2, NM 002744.3, NM 002744.4, NM 001033582.1,

NM 001242874.1, BC008058, BC014270, BC014270.2, NM 001242874.2, NM 002744.6,

NM 001033582.2

UniProt ID: Q05513

**Summary:** Protein kinase C (PKC) zeta is a member of the PKC family of serine/threonine kinases which

are involved in a variety of cellular processes such as proliferation, differentiation and secretion. Unlike the classical PKC isoenzymes which are calcium-dependent, PKC zeta exhibits a kinase activity which is independent of calcium and diacylglycerol but not of phosphatidylserine. Furthermore, it is insensitive to typical PKC inhibitors and cannot be activated by phorbol ester. Unlike the classical PKC isoenzymes, it has only a single zinc finger module. These structural and biochemical properties indicate that the zeta subspecies is related to, but distinct from other isoenzymes of PKC. Alternative splicing results in multiple

transcript variants encoding different isoforms. [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).