

## **Product datasheet for TR315676**

## 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

## **GCP4 (TUBGCP4) Human shRNA Plasmid Kit (Locus ID 27229)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** GCP4 (TUBGCP4) Human shRNA Plasmid Kit (Locus ID 27229)

**Locus ID:** 27229

**Synonyms:** 76P; GCP-4; GCP4; Grip76; MCCRP3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: TUBGCP4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

27229). 5µg purified plasmid DNA per construct

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

RefSeq: BC000966, BC009870, NM 001286414, NM 014444, NM 014444.1, NM 014444.2,

NM 014444.3, NM 014444.4, NM 001286414.1, NM 001286414.2, BC000966.2, BC009870.2,

BC012801, BC012801.2, NM 001286414.3, NM 014444.5

UniProt ID: Q9UG|1

**Summary:** This gene encodes a component of the gamma-tubulin ring complex, which is required for

microtubule nucleation. In mammalian cells, the protein localizes to centrosomes in

association with gamma-tubulin. Crystal structure analysis revealed a structure composed of five helical bundles arranged around conserved hydrophobic cores. An exposed surface area located in the C-terminal domain is essential and sufficient for direct binding to gamma-tubulin. Mutations in this gene that alter microtubule organization are associated with microcephaly and chorioretinopathy. Alternative splicing results in multiple transcript

variants. [provided by RefSeq, May 2015]

**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 custom shRNA service.







## 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).