

## **Product datasheet for TR320307**

## Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com

**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

EU: info-de@origene.com CN: techsupport@origene.cn

## PLK3 Human shRNA Plasmid Kit (Locus ID 1263)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** PLK3 Human shRNA Plasmid Kit (Locus ID 1263)

**Locus ID:** 1263

Synonyms: CNK; FNK; PLK-3; PRK

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: PLK3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

1263). 5µg purified plasmid DNA per construct

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

RefSeq: NM 004073, NM 004073.1, NM 004073.2, NM 004073.3, BC013899, BC013899.2, BC004135,

BC004198, BC013960, NM 004073.4

UniProt ID: 09H4B4

Summary: The protein encoded by this gene is a member of the highly conserved polo-like kinase family

of serine/threonine kinases. Members of this family are characterized by an amino-terminal kinase domain and a carboxy-terminal bipartite polo box domain that functions as a

kinase domain and a carboxy-terminal bipartite polo box domain that functions as a substrate-binding motif and a cellular localization signal. Polo-like kinases are important regulators of cell cycle progression. This gene has also been implicated in stress responses and double-strand break repair. In human cell lines, this protein is reported to associate with centrosomes in a microtubule-dependent manner, and during mitosis, the protein becomes

localized to the mitotic apparatus. Expression of a kinase-defective mutant results in abnormal cell morphology caused by changes in microtubule dynamics and mitotic arrest

followed by apoptosis. [provided by RefSeq, Sep 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 <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).