

## Product datasheet for TR308696

#### 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

### **TOP3B Human shRNA Plasmid Kit (Locus ID 8940)**

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** TOP3B Human shRNA Plasmid Kit (Locus ID 8940)

Locus ID:

TOP3B1 Synonyms:

Vector: pRS (TR20003)

E. coli Selection: **Ampicillin** Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

TOP3B - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

8940). 5µg purified plasmid DNA per construct

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

NM 001282112, NM 001282113, NM 003935, NM 001349845, NM 001349847, RefSeq:

> NM 001349848, NM 001349850, NM 001349851, NM 001349852, NR 146277, NM 003935.1, NM 003935.2, NM 003935.3, NM 003935.4, NM 001282112.1, NM 001282113.1, BC002432,

NM 001282112.2, NM 001282113.2, NM 003935.5

**UniProt ID:** O95985

**Summary:** This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic

> states of DNA during transcription. This enzyme catalyzes the transient breaking and rejoining of a single strand of DNA which allows the strands to pass through one another, thus relaxing the supercoils and altering the topology of DNA. The enzyme interacts with DNA helicase SGS1 and plays a role in DNA recombination, cellular aging and maintenance of genome stability. Low expression of this gene may be related to higher survival rates in breast cancer patients. This gene has a pseudogene on chromosome 22. Alternate splicing results in multiple transcript variants. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq,

Aug 2013]

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 techsupport@origene.com. 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).