

## Product datasheet for TR309162

## OriGene Technologies, Inc.

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## **SPAG4 Human shRNA Plasmid Kit (Locus ID 6676)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** SPAG4 Human shRNA Plasmid Kit (Locus ID 6676)

Locus ID: 6676

CT127; SUN4 Synonyms:

Vector: pRS (TR20003)

E. coli Selection: Ampicillin Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

SPAG4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

6676). 5µg purified plasmid DNA per construct

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

NM 001317931, NM 003116, NM 003116.1, NM 003116.2, BC111378, BC143783, RefSeq:

NM 003116.3

UniProt ID: O9NPE6

**Summary:** The mammalian sperm flagellum contains two cytoskeletal structures associated with the

> axoneme: the outer dense fibers surrounding the axoneme in the midpiece and principal piece and the fibrous sheath surrounding the outer dense fibers in the principal piece of the tail. Defects in these structures are associated with abnormal tail morphology, reduced sperm motility, and infertility. In the rat, the protein encoded by this gene associates with an outer dense fiber protein via a leucine zipper motif and localizes to the microtubules of the manchette and axoneme during sperm tail development. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 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 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).