

Product datasheet for TR301447

OriGene Technologies, Inc.

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SPAG1 Human shRNA Plasmid Kit (Locus ID 6674)

Product data:

Product Type: shRNA Plasmids

Product Name: SPAG1 Human shRNA Plasmid Kit (Locus ID 6674)

Locus ID: 6674

Synonyms: CILD28; CT140; DNAAF13; HEL-S-268; HSD-3.8; SP75; TPIS

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: SPAG1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

6674). 5µg purified plasmid DNA per construct

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

RefSeq: NM 003114, NM 172218, NM 172218.1, NM 172218.2, NM 003114.1, NM 003114.2,

NM 003114.3, BC055091, BM557203, BM981630, NM 172218.3, NM 003114.5

UniProt ID: Q07617

Summary: The correlation of anti-sperm antibodies with cases of unexplained infertility implicates a role

for these antibodies in blocking fertilization. Improved diagnosis and treatment of

immunologic infertility, as well as identification of proteins for targeted contraception, are dependent on the identification and characterization of relevant sperm antigens. The protein expressed by this gene is recognized by anti-sperm agglutinating antibodies from an infertile woman. Furthermore, immunization of female rats with the recombinant human protein reduced fertility. This protein localizes to the plasma membrane of germ cells in the testis and to the post-acrosomal plasma membrane of mature spermatozoa. Recombinant polypeptide binds GTP and exhibits GTPase activity. Thus, this protein may regulate GTP signal transduction pathways involved in spermatogenesis and fertilization. Two transcript

variants of this gene encode the same protein. [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).