

Product datasheet for **RG214367**

SPAG4 (NM_003116) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SPAG4
Synonyms:	CT127; SUN4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG214367 representing NM_003116
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGCGAAGCTCCCGCCGGGCTCGGCCTCGTCCTCGCGCAAGCACACGCCCAACTTTTTTCAGCGAGA
ACAGCTCAATGAGCATCACCTCGGAGGACAGCAAAGGGCTCCGGTCAGCGGAGCCCGGGCCTGGGGAGCC
CGAGGGCAGAAGAGCCCGGGGCCGAGCTGCGGTGAGCCCGCTTGAGCGCGGAGTGCCCGGAGGAACC
ACATGGGCAGGAAGCTCTCAGCAGAAGCCAGCGCCTCGGAGCCACAACCTGGCAGACAGCCTGTGGCGGG
CAACCGTGAGGGGCGGGCCTCGGAACCGACTGGGTCTCCAGTAGTCTCTGAGGAGCCGCTCGACCTTCT
CCCGACCTGGATCTGAGGCAGGAGATGCCTCCCCGCGGGTGTTCAAGAGCTTTCTGAGCCTGCTCTTC
CAGGGGCTGAGCGTGTTGTTATCCCTGGCAGGAGACGTGCTGGTCAGCATGTACAGGGAGGTCTGTTCCA
TCCGTTCTCTGTTACGGCTGTGTCGCTGCTGAGCCTCTTTCTGTCAGCATTCTGGCTGGGGCTTCTGTA
CCTGGTCTCTCCTTTGGAGAATGAACCTAAGGAGATGCTGACTCTAAGTGAGTACCACGAGCGCTGCGC
TCCCAGGGGCAGCAGCTGCAGCAGCTCCAGGCCGAGCTGGATAAACTCCACAAGGAGGTGTCCACTGTTC
GGGCAGCCAACAGCGAGAGAGTGCCAAGCTCGTGTTCCAGAGGCTGAATGAGGATTTTGTGCGGAAGCC
CGACTATGCTTTGAGCTCTGTGGGAGCCTCCATCGACCTGCAGAAGACATCCCACGATTACGCAGACAGG
AACACTGCCTACTTCTGGAATCGCTTCAGCTTCTGGAACACGCACGGCCGCCACGGTTATCCTGGAGC
CCCACGTGTTCCCTGGGAATTGCTGGGCTTTTGAAGGCGACCAAGGCCAGGTGGTGATCCAAGTCCCGGG
CCGAGTGACGTGAGCGACATCACTCTGCAGCATCCACCGCCAGCGTGAGACACCGGAGGAGCAAC
AGCGCCCCCGGATTTTCGGGTCTTTGGCCTCCAGGTTTATGATGAACTGAAGTTTCTTGGGAAAT
TCACCTTCGATGTTGAGAAATCGGAGATTCACTTTCCACCTGCAGAATGACCCCCAGCTGCCTTTCC
CAAGGTGAAGATCCAGATTCTAAGCAACTGGGGCCACCCCGTTTACGTGCTTGTATCGAGTCCGTGCC
CACGGTGTGCAACCTCAGAGGGGCGAGGGCAGTGCACAGGGGCCCCAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



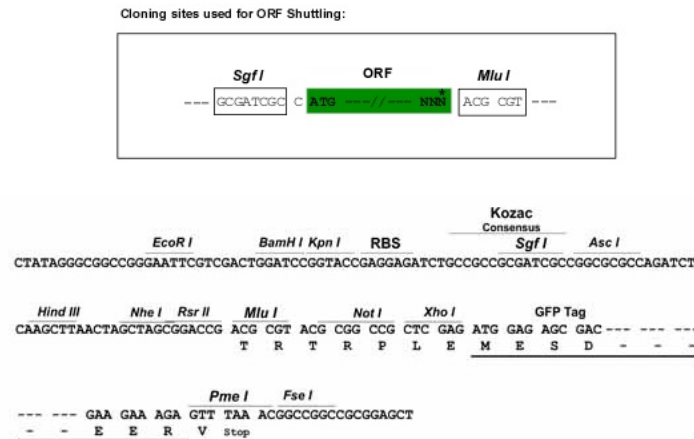
Protein Sequence: >RG214367 representing NM_003116
Red=Cloning site Green=Tags(s)

MRRSSRPGSASSSRKHTPNFFSENSMSITSSEDSKGLRSAEPGPGEPEGRARRGPGSCGEPALSAGVPGGT
TWAGSSQKQAPRSHNQWTACGAATVRGGASEPTGSPVVEEPLDLLPTLDLRQEMPPPRVFKSFLSLLF
QGLSVLLSLAGDVLVSMYEVCSIRFLFTAVSLLSLFLSAFWLGLLYLVSPLENEPKEMLTSEYHERVR
SQGQQLQQLQAELDKLHKEVSTVRAANSERVAKLVFQRLNEDFVRKPDYALSSVGASIDLQKTSHDYADR
NTAYFWRNFSFWRNYPPTVILEPHVFPNCWAFEGDQGQVVIQLPGRVQLSDITLQHPPPSVEHTGGAN
SAPRDFAVFGLQVYDETEVSLGKFTFDVEKSEIQTFHLQNDPPAAFPKVKIQILSNWGHPRFTCLYRVRA
HGVRTSEGAEGSAQGPH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003116

ORF Size: 1311 bp

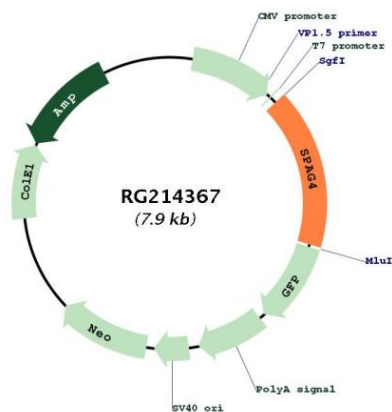
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_003116.3</u>
RefSeq Size:	1452 bp
RefSeq ORF:	1314 bp
Locus ID:	6676
UniProt ID:	<u>Q9NPE6</u>
Cytogenetics:	20q11.22
Protein Families:	Transmembrane
Gene 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]

Product images:



Circular map for RG214367