

## Product datasheet for **RC205275**

### SPAG6 (NM\_172242) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SPAG6 (NM_172242) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SPAG6
Synonyms:	CFAP194; CT141; FAP194; pf16; Repro-SA-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC205275 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGTCAGAGGCAGGTGCTGCAAGTGTTCGAGCAATACCAGAAGGCCAGGACCCAGTTCGTGCAGATGG  
 TGGCGGAGCTGGCGACTAGACCCAAAACATCGAGACGCTGCAGAACCGGGTGTAAATGTCTTTGCTGAG  
 AACTCTTCTTCTGGACGTGGTCCCAACAATTCAACAGATTGCTGCTTTGGCTCTTGGGAGACTGGCCAAT  
 TATAATGATGACCTAGCAGAAGCTGTTGTGAAGTGCACATTCTCCACAGCTTGTTTATTCATTGGCAG  
 AACAGAATCGTTCTACAAGAAAGCAGCTGCCTTTGTGTTACGAGCAGTTGGTAAACATTCTCCCCAGCT  
 AGCTCAGGCAATAGTCGATTGTGGAGCACTGGATACGCTGGTCATATGCTTGAAGATTTTGACCCTGGA  
 GTCAAGGAGGCTGCAGCCTGGGCACTTAGATATATTGCAAGACATAATGCAGAACTGTCACAAGCTGTGG  
 TGGATGCAGGAGCTGTTCTCTTTTACTCTGTATCCAGGAGCCAGAAATTGCTTTGAAAGGGATTGC  
 TGCTTCGGCCCTCAGTGATATTGTAAGCATTCTCCAGAGTTAGCACAGACAGTAGTGGATGCAGGAGCT  
 GTTGCTCATTAGCCAGATGATCCTGAACCCTGATGCTAAATTGAAGCATCAGATCCTTTTCAGCTCTCA  
 GTCAGGTTTCAAAACATTCCGTGGATCTGGCAGAAATGGTTGTTGAAGCAGAGATTTTCCAGTTGTA  
 TACCTGTCTGAAGGACAAGGATGAATACGTGAAGAAAAATGCTTCTACTTTAATTAGAGAGATTGCAAAA  
 CATACACCCGAGCTTTCACAGCTGGTAGTTAACGCAGGAGGGTGTGCTGCCGTGATTGACTGCATTGGGT  
 CCTGCAAAGGGAACACACGGCTGCCTGGCATCATGATGCTTGGTTATGTAGCAGCTCATTCTGAGAACCT  
 AGCAATGGCAGTCATATTTCTAAGGGTGTACCCAGTTGTCAGTCTGCTGTGCAAGAAGCCGGAAGAT  
 CATATTAAGGCTGCAGCTGCTTGGGCTTAGGACAGATTGGAAGACACACTCTGAACACGCACGGGCTG  
 TTGCAGTCACAAACTTTGCCAGTTCTGCTTTCTTTGTACATGTCAACAGAAAGTCTGAGGATCTCCA  
 AGTAAAAAGTAAAAAGCCATAAAGAATATCTGCAAAAATGTACCTACTTACCAGCCCTTGAACCATTT  
 CTATATGATGCTCCTCCAATATTCTGAAACATGTGGTTGGACAGTTTCAAGGTATTATTTCCCTGGA  
 TATTCAGATACACTTCTGCGGAGGGTGGACAGCTATCAACCACT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC205275 protein sequence  
 Red=Cloning site Green=Tags(s)

MSQRQVLQVFEQYQKARTQFVQMVAELATRPQNIETLQNAGVMSLLRLLLLDVVPTIQQIAALALGRLAN  
 YNDLAEAVVKDILPQLVYSLAEQNRFYKAAAFVLRVAVGKHSPQLAQAI VDCGALDTL VICLEDFDPG  
 VKEAAAALRYIARHNAEL SQAVVDAGAVPLL VLCTIQEPEIALKGIAASAL SDIVKHSPELAQT VVDAGA  
 VAHLAQMILNPDAKLKHQIL SALSQVSKHSVDLAEMVVEAEIFPVVLTCLKDKDEYVKNASTLIREIAK  
 HTPELS QLVVNAGGVAVIDCIGSCKGNTRLPGIMMLGYVAHSENLAMAVIISKGVPQLSVCLSEEPED  
 HIKAAAALWALGQIGRHTPEHARAVAVTNTLPVLLSLYMSTESSEDLQVKS KKA IKNILQKCTYLPALPEP  
 LYDAPPN ILKHVVGQFSKVLFPWIFRYTSAEGGQLSTT

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6314\\_f06.zip](https://cdn.origene.com/chromatograms/mk6314_f06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_172242

**ORF Size:** 1374 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:** [NM\\_172242.3](#)

**RefSeq Size:** 2488 bp

**RefSeq ORF:** 1377 bp

**Locus ID:** 9576

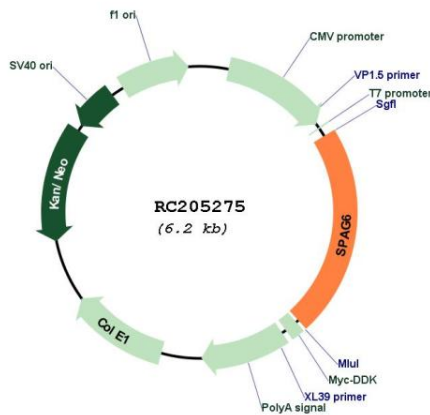
UniProt ID: [O75602](#)

Cytogenetics: 10p12.2

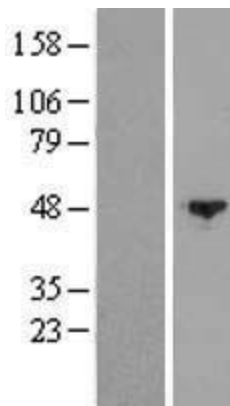
MW: 49.6 kDa

**Gene 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 antibodies from an infertile man. This protein localizes to the tail of permeabilized human sperm and contains eight contiguous armadillo repeats, a motif known to mediate protein-protein interactions. Studies in mice suggest that this protein is involved in sperm flagellar motility and maintenance of the structural integrity of mature sperm. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]

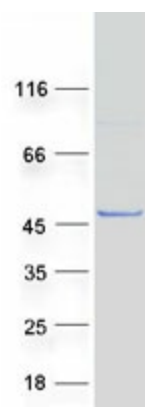
**Product images:**



Circular map for RC205275



Western blot validation of overexpression lysate (Cat# [LY406761]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205275 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SPAG6 protein (Cat# [TP305275]). The protein was produced from HEK293T cells transfected with SPAG6 cDNA clone (Cat# RC205275) using MegaTran 2.0 (Cat# [TT210002]).