

Product datasheet for **RC216556**

SPAG1 (NM_172218) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPAG1 (NM_172218) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SPAG1
Synonyms:	CILD28; CT140; DNAAF13; HEL-S-268; HSD-3.8; SP75; TPIS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216556 representing NM_172218
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCACCAAGATTATCCATCATTGTGGGGCTTTGGAACAACAAAAACATTCAAATTCACCATTGAAC
 ATCTAGATTTCAAATACATTGAAAAATGTTTCAGATGTTAAACATCTGAAAAAATCTTTTTCGCTGCTCAG
 ATCTGGTGAGGAAGGATATTATCCTGAACCTACAGAATTTTGTGAAAAGCATCTTCAAGCCTTGCCCTT
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 AACTGAGACATTTCCAGCAATGAAAGATAATTTGCCTCCAGTTTCGTGGTTCAAACAGCTGTCTTCATGTA
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 CGGGCCTCTGCGGCGGGCGGGCGGGCGGGCCACCGGGCATCCGGGCGGGCGGCGAGGGCGGGGAGA
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 ACTAATTAGCAAGGGCCAAAAGGAGCTAATTGAACAGCTGTTGAGGACCTTTCCGACACACCAAAACAC
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ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RC216556 representing NM_172218
 Red=Cloning site Green=Tags(s)

MTTKDYPSLWFGTTTKFKIPIEHLDFKYIEKCSVDVKHLEKILCVLRSGEEGYPELTFCEKHLQALAP
 ESRALRKDKPAATAASF TAEWEKIDGDIKSWSEIKKEEDKMHFHETETFPAMKDNLPPVRGSNSCLHV
 GKEKYSKRPTKKKTPRDYAEWDFDVEKECLKIDEDYKEKTVIDKSHLSKIE TRIDTAGL TEKEKDFLAT
 REKEKGNEAFNSGDYEEAVMY YTRSISALPTVVAYNNRAQAEIKLQNWNSAFQDCEKVLLEPGNVKALL
 RRATTYKHQNKLREATEDLSKVL DVEPDNDLAKKTLSEVERDLKNSEAASETQTKGKRMV IQE IENSEDE
 EGKSGRKHEDGGGDKKPAEPAGAARAAQPCVMGNIQK KLTGKAEGGKRPARGAPQRGQTPEAGADKRSR
 RASAAAAAGGGATGHPGGGQGAENPAGLKSQGNELFRSQGFAEAAGKYSAAIALLEPAGSEIADDLSILY
 SNRAACYLKEGNCSGCIQDCNRAL ELHPFSMKPLLRAMAYETLEQY GKAYVDYKTVLQIDCGLQLANDS
 VNRLSRILMELDGPNWREKLSPIPAVPASVPLQAWHPAKEMI SKQAGDSSSHRQQGITDEKTFKALKEEG
 NQCVNDKNYKDALS KYSECLKINNKECAIYTNRALCYLKL CQFEEAKQDCDQALQLADGNV KAFYRRALA
 HKGLKNYQKSLIDLNKVILLDPSI IEAKMELEE VTRLLNLKDKTAPFNKEKERRKIEIQEVNEGKEEPGR
 PAGEVSMGLASEKGGKSSRSPEDPEKLP IAKPNNA YEFQGIINALSTRKDKEACAHLLAITAPKDLPMF
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 HFTLEDIQALKRQYEL

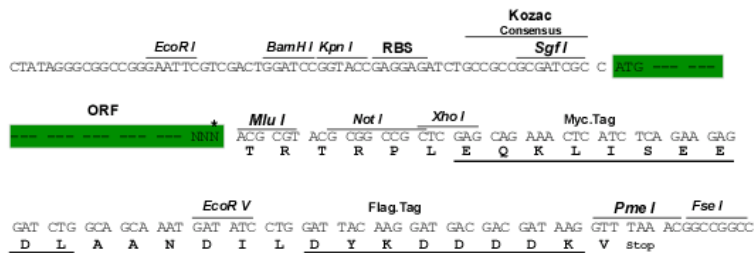
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8016_d06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



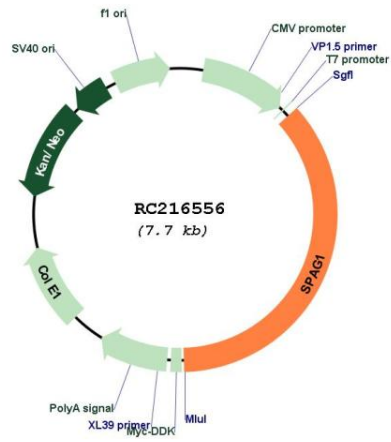
* The last codon before the Stop codon of the ORF

ACCN: NM_172218

ORF Size: 2778 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:	<ol style="list-style-type: none">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_172218.3
RefSeq Size:	3760 bp
RefSeq ORF:	2781 bp
Locus ID:	6674
UniProt ID:	Q07617
Cytogenetics:	8q22.2
MW:	103.6 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 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]

Product images:



Circular map for RC216556