

Product datasheet for RC201938

spindlin 1 (SPIN1) (NM_006717) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	spindlin 1 (SPIN1) (NM_006717) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	spindlin 1
Synonyms:	SPIN; TDRD24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201938 representing NM_006717 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGACCCATTTCGGAAAGACACCTGGCCAGCGGTCCAGAGCTGATGCAGGCCATGCTGGAGTATCTG
CCAACATGATGAAGAAGAGGACATCCCACAAAAACATCGGAGCAGTGTGGTCCGAGCAAACCTGTTTC
CCAGCCCCGGCGGAACATCGTAGGCTGCAGGATCAGCATGGGTGGAAAGAGGGGAATGGCCCTGTTACC
CAGTGGAAAGGAACCGTTCTGGACCAGGTGCCTGTAATCCTTCTTTGTATCTTAAAAATACGATGGAT
TTGACTGTGTTTATGGACTAGAACTTAATAAAGATGAAAGAGTTTCTGCGCTTGAAGTCCCTCCCTGATAG
AGTTGCGACATCTCGAATCAGCGATGCACACTTGGCAGACACAATGATTGGCAAAGCAGTGGAAACATATG
TTTGAGACAGAGGATGGTTCTAAAGATGAGTGGAGGGGAATGGTCTTAGCACGTGCACCTGTCATGAACA
CATGGTTTTACATTACCTATGAGAAAGACCCTGTCTTGTACATGTACCAACTCTTAGATGATTACAAAGA
AGGCGACCTTCGCATTATGCCTGATTCCAATGATTCACCTCCAGCAGAAAGGGAACAGGAGAAGTTGTG
GACAGCCTGGTAGGCAACAAGTGAATATGCCAAGAAGATGGCTCGAAAAGGACTGGCATGGTCATTC
ATCAAGTAGAAGCCAAGCCCTCCGTCTATTTTCATCAAGTTTGATGATGATTTCCATATTTATGTCTACGA
TTTGGTAAAAACATCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC201938 representing NM_006717
 Red=Cloning site Green=Tags(s)

MKTPFGKTPGQRSRADAGHAGVSANMMKKRTSHKKHRSSVGPSPVSPRRNIVGCRIQHGWKEGNGPVT
 QWKGTVLDQVPVNPSTLYLIKYGDFDCVYGLELNKDERVSALEVL PDRVATSRISDAHLADTMIGKAVEHM
 FETEDGSKDEWRGMVLARAPVMNTWFYITYEKDPVLYMYQLDDYKEGDLRIMPDSNDSPPAEREPGEVV
 DSLVGKQVEYAKEDGSKRTGMVIHQVEAKPSVYFIKFDDDFHIIYVYDLVKTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6308_d07.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_006717

ORF Size: 786 bp

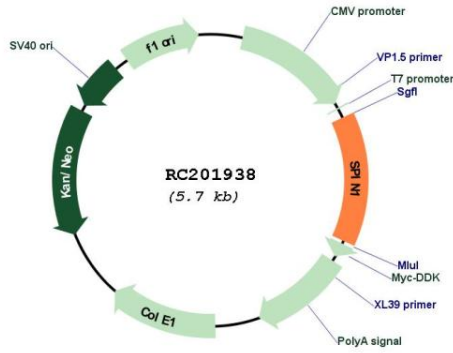
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

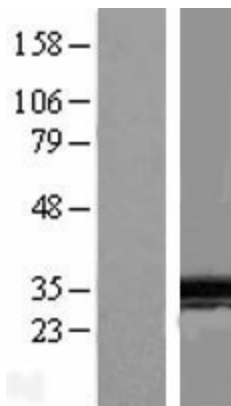
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_006717.3
RefSeq Size:	4535 bp
RefSeq ORF:	789 bp
Locus ID:	10927
UniProt ID:	Q9Y657
Cytogenetics:	9q22.1
Domains:	Spin-Ssty
MW:	29.4 kDa
Gene Summary:	<p>Chromatin reader that specifically recognizes and binds histone H3 both trimethylated at 'Lys-4' and asymmetrically dimethylated at 'Arg-8' (H3K4me3 and H3R8me2a) and acts as an activator of Wnt signaling pathway downstream of PRMT2. In case of cancer, promotes cell cancer proliferation via activation of the Wnt signaling pathway (PubMed:24589551). Overexpression induces metaphase arrest and chromosomal instability. Localizes to active rDNA loci and promotes the expression of rRNA genes (PubMed:21960006). May play a role in cell-cycle regulation during the transition from gamete to embryo. Involved in oocyte meiotic resumption, a process that takes place before ovulation to resume meiosis of oocytes blocked in prophase I: may act by regulating maternal transcripts to control meiotic resumption.[UniProtKB/Swiss-Prot Function]</p>

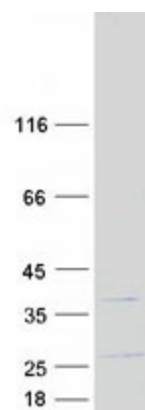
Product images:



Circular map for RC201938



Western blot validation of overexpression lysate (Cat# [LY416457]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201938 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SPIN1 protein (Cat# [TP301938]). The protein was produced from HEK293T cells transfected with SPIN1 cDNA clone (Cat# RC201938) using MegaTran 2.0 (Cat# [TT210002]).