

## Product datasheet for RC221009

### SPANXB1 (NM\_032461) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SPANXB1 (NM\_032461) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SPANXB1  
**Synonyms:** B1; CT11.2; SPANX-B; SPANXB; SPANXB2; SPANXF1; SPANXF2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC221009 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGGCCAACAATCCAGTGTCCGCAGGCTGAAGAGGAGCGTCCCCTGTGAATCCAACGAGGCCAACGAGG  
 CCAATGAGGCCAACAAGACGATGCCGAGACCCCACTGGGGACTCAGACCCGCAACCTGCTCCTAAAAA  
 AATGAAAACATCTGAGTCCTCGACCACTAGTGGTTCGCTACAGGAGGAACGTGAAAAGAATCTCCA  
 GAGGAAGTGGTGAATGACCACGCCGAGAGAACAAGATCAACCCGACCAATGGAGGAGGAGGAATTCA  
 TAGAAATAACGACTGAAAGACCTAAAAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC221009 protein sequence  
 Red=Cloning site Green=Tags(s)

MGQQSSVRRLLKRSVPCEANEANEANKTMPETPTGSDPQPAPKKMKTSESSTILVVRYYRRNVKRTSP  
 EELVNDHARENRPDQMEEEEFIEITTPPKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6315\\_g09.zip](https://cdn.origene.com/chromatograms/mk6315_g09.zip)

**Restriction Sites:** SgfI-MluI


[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_032461

**ORF Size:** 309 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\\_032461.2](#), [NP\\_115850.1](#)

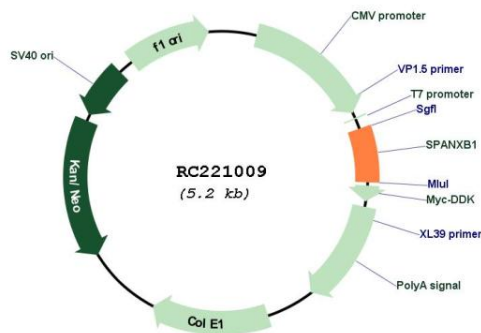
**RefSeq Size:** 469 bp

**RefSeq ORF:** 312 bp

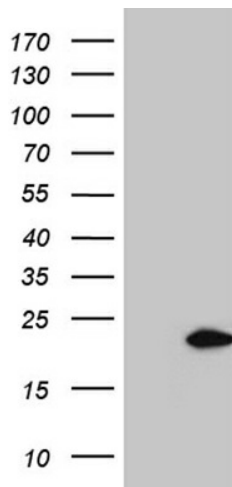
**Locus ID:** 728695  
**UniProt ID:** [Q9NS25](#)  
**Cytogenetics:** Xq27.1  
**MW:** 11.8 kDa

**Gene Summary:** Temporally regulated transcription and translation of several testis-specific genes is required to initiate the series of molecular and morphological changes in the male germ cell lineage necessary for the formation of mature spermatozoa. This gene is a member of the SPANX family of cancer/testis-associated genes, which are located in a cluster on chromosome X. The SPANX genes encode differentially expressed testis-specific proteins that localize to various subcellular compartments. This particular family member contains an additional 18 nucleotides in its coding region compared to the other family members in the same gene cluster. This family member is also subject to gene copy number variation. Although the protein encoded by this gene contains consensus nuclear localization signals, the major site for subcellular localization of expressed protein is in the cytoplasmic droplets of ejaculated spermatozoa. This protein provides a biochemical marker for studying the unique structures in spermatozoa, while attempting to further define its role in spermatogenesis. [provided by RefSeq, Apr 2014]

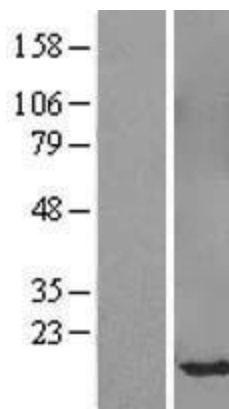
## Product images:



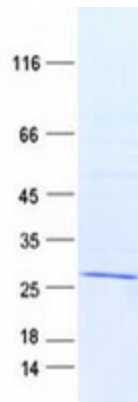
Circular map for RC221009



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SPANXB1 (Cat# RC221009, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SPANXB1 (Cat# [TA811401])(1:2000). Positive lysates [LY410096] (100ug) and [LC410096] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410096]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221009 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SPANXB1 protein (Cat# [TP321009]). The protein was produced from HEK293T cells transfected with SPANXB1 cDNA clone (Cat# RC221009) using MegaTran 2.0 (Cat# [TT210002]).