

## Product datasheet for RC205245

### SPANXB2 (NM\_145664) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SPANXB2 (NM\_145664) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SPANXB2  
**Synonyms:** SPANX; SPANXB  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC205245 representing NM\_145664  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCCAACATCCAGTGTCCGCAGGCTGAAGAGGAGCGTCCCCTGTGAATCCAACGAGGCCAACGAGG  
CCAATGAGGCCAACAGACGATGCCGGAGACCCCAACTGGGGACTCAGACCCGCAACCTGCTCCTAAAAA  
AATGAAAACATCTGAGTCTCGACCATACTAGTGGTTCGCTACAGGAGGAACGTGAAAAGAACATCTCCA  
GAGGAAGTGGTGAATGACCACGCCCGAGAGAACAATCAACCCGACCAATGGAGGAGGAGGAATTCA  
TAGAAATAACGACTGAAAGACCTAAAAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC205245 representing NM\_145664  
Red=Cloning site Green=Tags(s)  
MGQQSSVRRLLKRSVPESNEANEANEANKTMPETPTGDSDPQPAPKMKMTSESSTILVVRYRRNVKRTSP  
EELVNDHARENINPDQMEEEFIEITTERPKK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8103\\_f08.zip](https://cdn.origene.com/chromatograms/mk8103_f08.zip)

**Restriction Sites:** SgfI-MluI



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Cloning Scheme:



ACCN: NM\_145664

ORF Size: 309 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

**RefSeq:** [NM\\_145664.1](#), [NP\\_663697.1](#)

**RefSeq Size:** 469 bp

**RefSeq ORF:** 311 bp

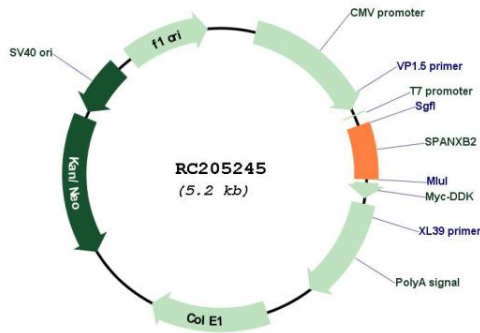
**Locus ID:** 100133171

**Cytogenetics:** Xq27.1

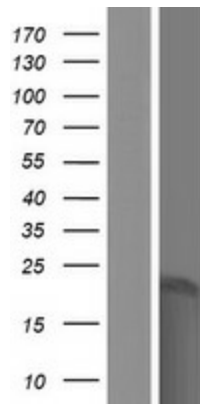
**MW:** 11.8 kDa

**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 gene maps to chromosome X in a head-to-tail orientation with SPANX family member B1 and appears to be a duplication of that locus. The SPANXB genes are unique members of this gene family, since they contain an additional 18 nt in their coding region compared to the majority of family members. 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 spermatazoa, while attempting to further define its role in spermatogenesis. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC205245



Western blot validation of overexpression lysate (Cat# [LY407889]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205245 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).