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Product datasheet for RC221227

SPO11 (NM_012444) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPO11 (NM_012444) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SPO11
Synonyms:	CT35; SPATA43; TOPOVIA; TOPVIA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC221227 representing NM_012444
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCTTTGCACCTATGGGGCCCGAGGCCTCGTTCTTCGACGTTTTGGACCGACACAGGGAGTCCCTGC
TGGCTGCCCTGAGGAGAGGTGGCAGGGAGCCCCCAACTGGGGGAAGCCGCCTGGCCTCCAGTTCTGAGGT
TCTTGCATCTATAGAAAATATTATCCAAGACATAATCACAAGCTTGGCAAGAAATGAAGCACCTGCATTC
ACGATAGACAACAGATCAAGCTGGGAAAACATAAAGTTTGAAGATTCTGTGGGTCTTCAGATGGTATCCC
ATTGCACCACCAGAAAGATCAAAAGTGATTCACCAAAATCAGCTCAAAAATTTTCTCTAATCCTTAAAAT
ATTGTCCATGATTTATAAATTAGTACAGAGCAACACTTATGCAACCAAAAGGGACATATATTACACTGAC
AGTCAACTCTTTGGTAACCAGACTGTCGTCGACAATATTATCAATGACATTTCTTGCATGTTAAAAGTGT
CAAGGAGGAGTCTACATATATTATCTACATCAAAAGGTTTAATTGCTGGCAACTTAAGATACATCGAGGA
AGATGGCACCAAAGTGAATTGTACCTGTGGTGCAACGGCTGTTGCTGTGCCATCGAATATTCAAGGAATT
CGGAATTTAGTTACAGATGCAAAGTTTGTATTAATTGTAGAAAAAGATGCAACATTTCAGCGGCTCCTAG
ATGACAACTTTTGCAACAAATTGTCTCCTTGCATCATGATTACGGGAAAGGGAGTTCCTGATCTAAACAC
AAGACTTTTAGTCAAGAAACTGTGGGATACATTTCATGTTCCTGTTTTCACTCTTGTAGATGCTGATCCA
CATGGCATAGAAATAATGTGCATCTATAAGTATGGATCTATGTCTATGTCTTTTGAAGCTCATCATCTCA
CAGTTCCAGCTATTAGATGGCTTGGTCTTCTCCCTTCTGATCTTAAAAGATTAAATGTACCTAAAGATAG
TTTGATTCCACTGACAAAAAGGGACCAAATGAAACTTGACAGTATCCTGAGGAGACCTTATGTTACCTGC
CAACCATTTTGGAGAAAAGAAATGGAAATAATGGCAGACTCTAAAATGAAGGCAGAAATTCAAGCTTTGA
CTTTCCTATCATCAGATTATCTTTCCAGAGTGTACTTACCTAACAAATTAAAATTTGGAGGATGGATA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC221227 representing NM_012444
Red=Cloning site Green=Tags(s)

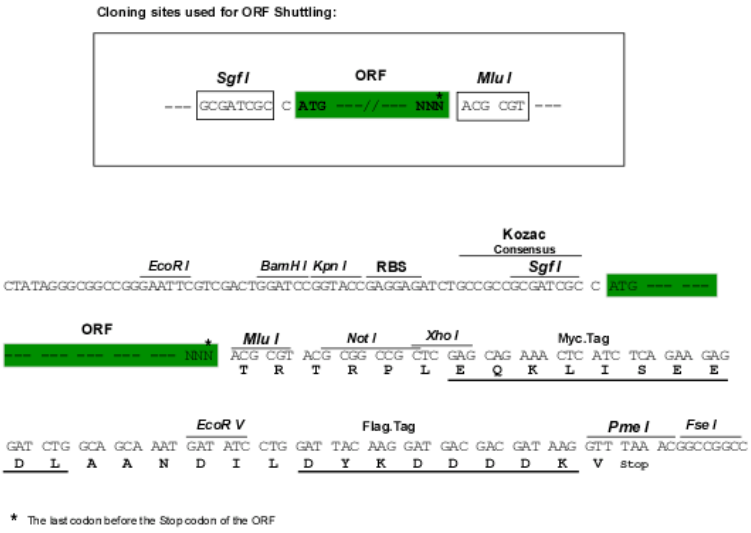
MAFAPMGPEASFFDVLDRHRESLLAALRRGGREPPTGGSRLASSSEVLASIENIIQDIITSLARNEAPAF
TIDNRSSWENIKFEDSVGLQMVSHCTTRKIKSDSPKSAQKFSLILKILSMIYKLVQSNTYATKRDIYYTD
SQLFGNQTVVDNIINDISCMLKVSRRSLHILSTSKGLIAGNLRYIEEDGTKVNCTCGATAVAVPSNIQGI
RNLVTDAKFVLIVEKDATFQRLLDDNFCNKLSPCIMITGKGVPDLNTRLLVKKLWDTFHVPVFTLVDADP
HGIEIMCIYKYGSMSMSFEAHHLTVPAIRWLGLLPSDLKRLNVPKDSLIPLTKRDQMKLDSILRRPYVTC
QPFWRKEMEIMADSKMKAEIQALTFLSSDYLSRVYLPNKLKFGGWI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4431_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012444

ORF Size: 1188 bp

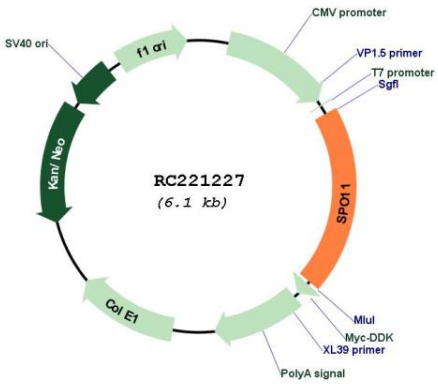
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

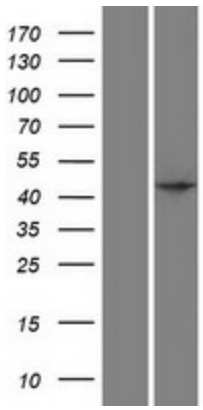
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_012444.3
RefSeq Size:	1826 bp
RefSeq ORF:	1191 bp
Locus ID:	23626
UniProt ID:	Q9Y5K1
Cytogenetics:	20q13.31
Protein Families:	Druggable Genome, Transcription Factors
MW:	44.4 kDa
Gene Summary:	Meiotic recombination and chromosome segregation require the formation of double-strand breaks (DSBs) in paired chromosome homologs. During meiosis in yeast, a meiotic recombination protein is covalently-linked to the 5' end of DSBs and is essential for the formation of DSBs. The protein encoded by this gene is similar in sequence and conserved features to the yeast meiotic recombination protein. The encoded protein belongs to the TOP6A protein family. Several transcript variants encoding different isoforms have been found for this gene, but the full-length nature of only two of them have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC221227



Western blot validation of overexpression lysate (Cat# [LY415764]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221227 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).