

Product datasheet for MR226168

Spo11 (NM_012046) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Spo11 (NM_012046) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Spo11
Synonyms:	AI449549; Spo11a; Spo11b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226168 representing NM_012046 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGTTCGCGCCTATGGGGCCGAGGCTCGTTCCTCGACGCCCTGGATCGGCACAGGGCTTCCTGT
TGGCCATGGTGAAGAGAGGCGCAGGGGAGACCCCTGCCGGGGCCACCCGCGTGGCCTCTAGTTCTGAGGT
TCTTACAGCTATAGAAAATATTCCAAGACATAATCAAAGCTTGGCAAGAAATGAAGTGCCTGCCTTC
ACAATAGACAACAGATCGAGCTGGGAAAACATAATGTTTGATGATTCTGTGGCCTTCGGATGATACCTC
AGTGTACCACAAGAAAAATCAGAAGCGATTACCAAAAATCAGTTAAGAAATTCGCTCTGATTCTGAAAGT
ATTGTCCATGATTATAAATTAATACAGAGCGACACTTATGCAACCAAGAGAGACATATACTACACTGAC
AGCCAGCTCTTTGGGAACCAGGCTGCGGTGGACAGCGCCATCGATGACATTTCTGTATGCTGAAAGTGC
CCAGGAGGAGTCTGCACGTGCTATCTACTTCCAAGGGATTGATTGCTGGCAACTTGAGATACATGGAGGA
AGATGGTACCAGAGTCCAGTGTACCTGTAGTGCCACGGCTACTGCTGTGCCGACTAACATTCAAGGAATG
CAGCATCTGATCACAGATGCGAAGTTTCTGTTAATAGTCGAGAAGGATGCAACATTTTCAGCGGCTCCTGG
ACGACAACCTCTGCAGCAGGATGTCCCGTGCATCATGGTTACGGGAAAGGGCGTTCAGATCTGAACAC
GAGGCTCTTGGTAAAGAAGCTGTGGGACACCTTCATATTCCTGTTTTCACTGGTTCGATGCAGATCCC
TACGGCATCGAGATAATGTGCTATAAGTACGGATCCATGTCCATGTCTTTTGAAGCTCACAATCTCA
CTATCCCAACAATCAGATGGCTTGGTCTCCTCCCTTCTGATATCCAGAGTTAAATATACCTAAGGATAG
TTTGATCCCACTGACAAAGCATGACCAGATGAAGCTGGACAGCATCCTGAAGAGGCTTACATTACCTAC
CAGCCCTCTGGAAAAAGAGCTGGAGATGATGGCAGACTCTAAGATGAAGGCAGAGATCCAAGCCTTGA
CCTTGCTGCTGCTCAGACTACCTGTCCAGAGTGTACTTACCAACAAGCTGAGGTTTGGAGGATGGATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR226168 representing NM_012046
Red=Cloning site Green=Tags(s)

MAFAPMGPEASFFDALDRHRASLLAMVKRGAGETPAGATRVASSEVLTAIENIIQDIKSLARNEVPAF
 TIDNRSSWENIMFDDSVGLRMIPQCTTRKIRSDSPKSVKKFALILKVLSMIYKLIQSDTYATKRDIYYTD
 SQLFGNQAAVDSAIDDISCMCLKVPRRSLHVLSTSKGLIAGNLRYMEEDGTRVQCTCSATATAVPTNIQGM
 QHLITDAKFLLI VEKDATFQRLLDNFCSRMSPCIMVTGKGVDPDLNTRLLVKKLWDTFHIPVFTLVDADP
 YGIEIMCIYKYGSMMSMSFEAHNLTIPTIRWLGLLPSDIQRLNIPKDSLIPLTKHDQMKLDSILKRPYITY
 QPLWKKELEMMADSKMKAIEIQALTLLSSDYLSRVYLPNKLRFGGWI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9058_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012046

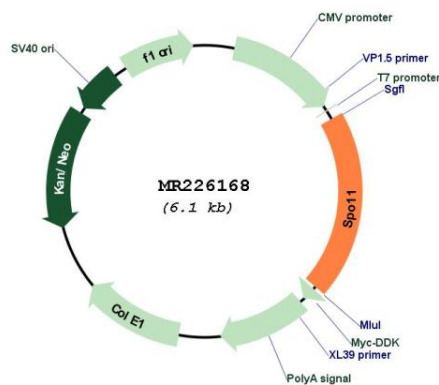
ORF Size: 1188 bp

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 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:	<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.
RefSeq:	<u>NM_012046.2</u> , <u>NP_036176.1</u>
RefSeq Size:	1716 bp
RefSeq ORF:	1191 bp
Locus ID:	26972
UniProt ID:	<u>Q9WTK8</u>
Cytogenetics:	2 95.64 cM
MW:	44.6 kDa
Gene Summary:	Isoform 1: Component of a topoisomerase 6 complex specifically required for meiotic recombination. Together with TOP6BL, mediates DNA cleavage that forms the double-strand breaks (DSB) that initiate meiotic recombination (PubMed:26917764). The complex promotes relaxation of negative and positive supercoiled DNA and DNA decatenation through cleavage and ligation cycles. Essential for the phosphorylation of SMC3, HORMAD1 and HORMAD2 (PubMed:22346761).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226168