

Product datasheet for MR226169

Spo11 (NM_001083959) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Spo11 (NM_001083959) 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:	>MR226169 representing NM_001083959 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCGTTCGCGCCTATGGGGCCGAGGCCTCGTTCCTCGACGCCCTGGATCGGCACAGGGCTTCCCTGTGGCCATGGTGAAGAGAGGCGCAGGGGAGACCCCTGCCGGGGCCACCCGCGTGGCCTCTAGGTTTGATGATTCTGTGCGCCTTCGGATGATACCTCAGTGTACCACAAGAAAAATCAGAAGCGATTACCAAAAATCAGTTAAGAAATTCGCTCTGATTCTGAAAGTATTGTCCATGATTATAAATTAATACAGAGCGACTTATGCAACCAAGAGGAGCAATGCTCATTCTGTGTTGACCTTGCATCTGCATAGAGACATATACTACACTGACAGCCAGCTCTTTGGGAACCAGGCTGCGGTGGACAGCGCCATCGATGACATTTCCCTGTATGCTGAAAGTGCCAGGAGGAGTCTGCACGTGCTATCTACTTCCAAGGGATTGATTGCTGGCAACTGAGATACATGGAGGAAGATGTACCAGAGTCCAGTGTACCTGTAGTGCCACGGCTACTGCTGTGCCGACTAACATTAAGGAATGCAGCATCTGATCACAGATGCGAAGTTTCTGTTAATAGTCGAGAAGGATGCAACATTTACAGCGCTCCTGGACGACAACTTCTGCAGCAGGATGTCCCCGTGCATCATGTTACGGGAAAGGGCGTTCCAGATCTGAACACGAGGCTCTTGGAAGAAGCTGTGGGACACCTTCATATTCCTGTTTTACACTGGTCGATGCAGATCCCTACGCATCGAGATAATGTGCATCTATAAGTACGGATCCATGTCCATGTCTTTGAAGCTCACAATCTCACTATCCAAACAATCAGATGGCTTGGTCTCCTCCCTTCTGATATCCAGAGGTTAAATATACCTAAGGATAGTTTGAATCCACTGACAAAAGCATGACCAGATGAAGCTGGACAGCATCCTGAAGAGGCCTTACATTACCTACCAGCCCTCTGGAAAAAAGAGCTGGAGATGATGCGAGACTCTAAGATGAAGGCAGAGATCCAAGCCTTGACCTTCTGTCTGCAGACTACCTGTCCAGAGTGTACTTACCCAACAAGCTGAGGTTTGGAGGATGGATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >MR226169 representing NM_001083959
Red=Cloning site Green=Tags(s)

MAFAPMGPEASFFDALDRHRASLLAMVKRGAGETPAGATRVASRFDDSVGLRMIPQCTTRKIRSDSPKSV
 KKFALILKVL SMIYKLIQSDTYATKRSNAHSVLT LHLHRDIYYTDSQLFGNQAAVDSAIDDISCMLKVPR
 RSLHVLSTSKGLIAGNLRYMEEDGTRVQCTCSATATAVPTNIQGMQHLLITDAKFL LIVEKDATFQRLLDD
 NFCSRMSPCIMVTGKGV PDLNTRLLVKKLWDTFHIPVFTLVADADPYGIEIMCIYKYGSM SMSFEAHLTI
 PTIRWLGLLPSDIQRLNIPKDSL IPLTKHDQMKLDSILKRPYITYQPLWKKELEMMADSKMKAEIQALTL
 LSSDYLSRVYLPNKLRFGGWI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1184_g08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001083959

ORF Size: 1113 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.

RefSeq: [NM_001083959.1](#), [NP_001077428.1](#)

RefSeq Size: 1641 bp

RefSeq ORF: 1116 bp

Locus ID: 26972

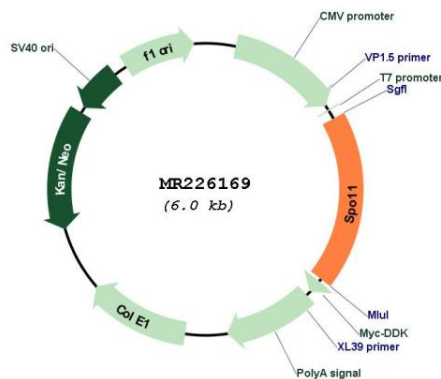
UniProt ID: [Q9WTK8](#)

Cytogenetics: 2 95.64 cM

MW: 42.2 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 MR226169