

Product datasheet for **SC110891**

MUS81 (NM_025128) Human Untagged Clone

Product data:

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|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | MUS81 (NM_025128) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | MUS81 |
| Synonyms: | SLX3 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >OriGene ORF within SC110891 sequence for NM_025128 edited (data generated by NextGen Sequencing)

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ATGGCGGCCCGGTCCGCCTGGGCCGGAAGCGCCCGCTGCCTGCCTGTCCCAACCCGCTC
TTCGTTTCGCTGGCTGACCGAGTGGCGGGACGAGGCGACCCCGCAGCAGGCACCCGACGCGC
TTCGATTTTCAGAAGGCGCTGCGTTCCCTCCGACGGTACCCACTGCCGCTGCGCAGCGGG
AAGGAAGCTAAGATCCTACAGCACTTCGGAGACGGGCTCTGCCGGATGCTGGACGAGCGG
CTGCAGCGGCACCGAACATCGGGCGGTGACCATGCCCCGGACTCACCATCTGGAGAGAAC
AGTCCAGCCCCGAGGGCGACTTGCAGGAGTCCAGGACTTCCATGCCAGTTCCTGCC
CAGCCCAAAGCGGGAGGCTCTGGCAGCTACTGGCCAGCTCGGCACTCAGGAGCCCGAGTG
ATACTGCTGGTGTCTACCGGGAGCACCTGAATCCTAATGGTCACCACTTCTTAACCAAG
GAGGAGCTGCTGCAGAGGTGTGCTCAGAAGTCCCCAGGGTAGCCCTGGGAGTGCCCCA
CCCTGGCCAGCCCTCCGCTCCCTCCTTACAGGAACCTGGTCTCAGGACACACCAGCCA
GCCAGTACTCATTGACCCAGAGGGCTGGAGCTGGCCAGAAGTTGGCCGAGTCAGAA
GGCCTGAGCTTGCTGAATGTGGGCATCGGGCCCAAGGAGCCCCCTGGGGAGGAGACGCA
GTGCCAGGAGCAGCTTACAGAGCTTGCAGTGAAGCAGGGTCCAGCAGCAGCCACTG
GAGCTGAGGCCTGGAGAGTACAGGGTGTGTTGTGTGGACATTGGCGAGACCCGGGGG
GGCGGGCACAGGCCGGAGCTGCTCCGAGAGCTACAGCGGCTGCACGTGACCCACACGGTG
CGCAAGCTGCACGTTGGAGATTTTGTGTGGTGGCTCAGGAGACCAATCCTAGAGACCCA
GCAAACCTGGGGAGTTGGTACTGGATCACATTGTGGAGCGCAAGCGACTGGATGACCTT
TGCAGCAGCATCATCGACGGCCGCTTCCGGGAGCAGAAGTTCCGACTGAAGCGCTGTGGT
CTGGAGCGCCGGGTATACCTGGTGAAGAGCATGGTCCGTCACAACTCAGCCTTCTCT
GAGAGCAGCACTGCTGCAGGCTGTACCAACTCAGGTATTGATGGCTTTTTTGTGAAG
GCACACAGCAGACATTAAGGAGTACAGCCGCTACCTGGCCCTTGTACTCGGGGCTGCAG
AGACTCTACCAGGGCCACACCTACGCAGCCGCCCTGGGGAACCCCTGGGAACCCCTGAA
TCAGGGGCCATGACCTCTCCAAACCTCTCTGCTCACTCCTCACCTTCAGTGACTTCAAC
GCAGGAGCCATCAAGAATAAGGCCAGTCGGTGCAGAGAAGTGTGGCCCGCAGCTGATG
CAGGTGCGCGGAGTGTGGGAGAAAGGCAGCAGCCCTGGTGGATCGATACAGCACCCT
GCCAGCCTCCTGGCCGCTATGATGCCTGTGCCACCCCAAGGAACAAGAGACTGCTG
AGCACCATTAAGTGTGGGCGTCTACAGAGGAATCTGGGGCCTGCTCTGAGCAGGACCTTA
TCCAGCTCTACTGCAGTACGGCCCTTGACCTGA
    
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Clone variation with respect to NM_025128.4
 110 g=>a;537 t=>c;539 g=>c;936 c=>t;1065 g=>a;1248 g=>t

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_025128 unedited
GTATACGACTCACTATAGGGGCGCCGATTTCGGCACGAGGGTGGGAGGGCGGCCGAG
GCTCTCCTCTCGTTAGTGCCCTGTGTTTGGGGCCCGTGATCTCAACGGTCTGCCCT
CGGTCTCCCTCTTCCCCCGCCCGCCCTGGGCCAGGTGTTGGAATCCCGACTCCAGAAT
GGCGGCGTCCCAGTCCCAGCGGGCGTGGAGCGCCGAGGACCCGCCCTCGGGCTCATGGCG
GCCCGGTCCGCTGGGCCGGAAGCGCCCGCTGCCTGCCTGTCCCAACCCGCTCTTCGTT
CGCTGGCTGACCGAGTGGCGGGACGAGGCGACCCCGCAGCAGGCACCCGACGCGCTTCGTA
TTTCAGAAGGCGCTGCGTTCCCTCCGACGGTACCCACTGCCGCTGCGCAGCGGGAAGGAA
GCTAAGATCCTACAGCACTTCGGAGACGGGCTCTGCCGGATGCTGGACGAGCGGCTGCAG
CGGCACCGAACATCGGGCGGTGACCATGCCCCGGACTCACCATCTGGAGAGAACAGTCCA
GCCCGCAGGGGGGACTTGCAGGAGTCCAGGACTTCCATGCCAGTTCCTGCCAGCCC
AAAGCGGGAGGCTCTGGCAGCTACTGGCAGCTCGGCACTCAGGAGCCCGAGTGATACTG
CTGGTGTCTANCCGGGAGCACCTGATCCTAATGGTCACCACTTCTTACCAAGGAGGAG
CTGCTGCAGAGGTGTGCTCANAAAGTCCCCAGGTAGCCCTGGGAGTGCCCCACCCTGG
NCAGGCCCTTCGNTCCCTTCTTACAGGAACCTGTTNCTCAGACACACAGCCAGCCAGTA
CTCATTGACCCAGAGGCTGNAGCTTGCCANAAGTTGCCGAGTCAAAGGCCTGAGCTG
CTGATGTGGGCATCGGGCCAGGAGCCCTGGGGAG
    
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Gene Summary:

This gene encodes a structure-specific endonuclease which belongs to the XPF/MUS81 endonuclease family and plays a critical role in the resolution of recombination intermediates during DNA repair after inter-strand cross-links, replication fork collapse, and DNA double-strand breaks. The encoded protein associates with one of two closely related essential meiotic endonuclease proteins (EME1 or EME2) to form a complex that processes DNA secondary structures. It contains an N-terminal DEAH helicase domain, an excision repair cross complementation group 4 (ERCC4) endonuclease domain, and two tandem C-terminal helix-hairpin-helix domains. Mice with a homozygous knockout of the orthologous gene have significant meiotic defects including the failure to repair a subset of DNA double strand breaks. [provided by RefSeq, Jun 2017]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the coding region, compared to variant 1. The encoded isoform (2) is shorter than isoform 1.