

Product datasheet for **SC337608**

MMS19 (NM_001289404) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MMS19 (NM_001289404) Human Untagged Clone
Tag:	Tag Free
Symbol:	MMS19
Synonyms:	CIAO4; hMMS19; MET18; MMS19L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001289404, the custom clone sequence may differ by one or more nucleotides

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ATGCGAACCCGGGAAGAAGAGCTAAAGAGCCTAGGAGCTGACTTCACCTTTGGCTTCATCCAGGTGATGG
ATGGGGAAAAGGATCCCCGTAATCTTCTGGTGGCCTTCCGCATCGTCCATGACCTCATCTCCAGGGACTA
TAGCCTGGGACCCTTTGTGGAGGAGTTGTTTGAAGTGACATCCTGTTATTTCCCTATCGATTTTACCCTT
CCACCTAATGATCCCATGGTATCCAGAGAGAAGACCTCATCCTGAGTCTTCGCGCTGTGCTGGCTTCTA
CACCACGATTTGCTGAGTTTCTGCTGCCCTGTTGATTGAGAAAGTGGATTCTGAGGTTCTGAGTGCCAA
GTTGGATTCTCTACAGACTCTGAATGCTTGCTGTGCTGTGATGGACAGAAGGAAGTGAAGGACTTCCTC
CCCAGCCTTTGGGCTTCTATCCGCAGAGAGGTGTTCCAGACGGCAAGTGAGCGGGTGGAGGCAGAGGGCC
TGGCGGCCCTCCACTCCCTGACTGCGTGTGTTGCTCGCTCTGTGCTGAGGGCTGATGCTGAGGACCTCT
TGACTCCTTCTTAGCAACATTCTACAGGACTGCAGGCACCACCTGTGTGAACCGGACATGAAACTGGT
TGGCCTAGTGCCAAGCTGTTGCAGGCAGCTGCAGGTGCATCTGCCCGGCCCTGTGACTCTGTACCAGCA
ATGTAAGTGCCTTTACTGTGGAACAGTTCCACAAGCACAGTCAGAGCAGCCAGCGCGGACAATCCTTGA
AATGCTCCTGGGTTTCTTGAAGCTGCAGCAGAAATGGAGCTATGAAGACAAGATCAAAGGCCTCTGAAT
GGCTTCAAGGACCAGCTGTGCTCACTGGTATTCATGGCTTAACAGACCCAGCACCAGCTTCAGCTTG
TTGGCATCCGTACACTGACAGTCTTGGGTGCCAGCCAGATCTCCTATCTTATGAGGACTTGAGAGTGGC
AGTGGGTACCTGTACAGACTGAGCTTCTGAAGGAGGATTTCCAGAGTTGGGTGGCAGCACTGGAAGCA
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TGCGTGTAGGGGAGTCAAATTTGACTAACGGAGATGAGCCACCCAATGCTCCCGGCATCTGTGCTGTCT
GCAAGCCTTGTGAGTGTATCAACACATCCAGCATCGTCAAGGAGACTGCTCTGCTGCTGCAGCAT
CTCTGGCAAGTGAACAGAGGGAATATGGTTGCACAATCCAGTGACGTTATTGCTGTCTGTGAGAGCTCA
GACAGATGGCAGAAAAATGTGAGCAGGACCTGAGAGTTGCTGGTATTTCCACCAGACAGCTATACCTTG
CCTGCTTGCCTTGGCTGTGACGGCCTCTATGCCAGAGAAGGAGCCCTCAGTTCTGAGAAAAGTACTATTG
GAGGATGAGGTGTTGGCTGCCATGGTGTCTGCTATTGGCACTGTACAACCCACCTGAGCCCTGAGTTAG
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CTTCCCGAGCAGATTCCAGCCATTCCAGGATGGCTCCTCAGGGCAGAGGGCGGTGATTGCACTGCTTATG
GCCTTTGCTGCTCCCTGCCTCGAAATGTGAAATCCCTCAGCTGAACCAACTCATGCGGGAGCTTTTGG
AACTGAGTGTGCTCCACAGCTGCCCTTTTCTTCCACCGCTGCTGCCAAGTGTGTTGAGGACTCCTCAA
CAAGCACCTGCAGGGCAGCAGCTGGATGAATTCCTACAGCTAGCTGTGGACAAAGTGGAGGCTGGCCTG
GGCTCTGGGCCCTGTGCTAGTACAGCCTTCACTCTTCTCTGGGTAACAAAGGCCCTAGTGTGCTAGAT
ACCATCCTCTCAGCTCCTGCCTTACAGCCCGGCTCATGGGCCCTCCTGAGTGACCCAGAATTAGGTCCAGC
AGCAGCTGATGGCTTCTCTGCTCATGTCTGACTGCACTGATGTGCTGACTCGTGTGCTGGCCATGCCGAA
GTGCGGATCATGTTCCGCCAGCGGTTCTTACAGATAATGTGCCTGCTTTGGTCCAGGGCTTCCATGCTG
CTCCCCAAGATGTGAAGCCAACTACTTGAAGGGTCTTTCTCATGTACTTAACAGGCTGCCCAAGCCTGT
ACTTTGCCAGAGCTGCCACGCTTCTTCTTCTGCTGCTGGAGGCCCTGTCTGCCCTGACTGTGTGGT
CAGCTCTCCACCCTCAGCTGCCTTACGCTCTTCTACTGGAAGCACCCCAAGTCAAGTCTTACAGTGG
ACACCCTCGTACCAAGTTTCTGAACCTCAGCTAGCCCTTCCATGGCTGTCCGGATCGCCGCACTGCA
GTGCATGCATGCTCTCACTCGCTGCCACCCCTGTGCTGCTGCCGTACAAACCACAGGTGATTCGGGCC
TTAGCCAAACCCCTGGATGACAAGAAGAGACTGGTGCACAAGGAAGCAGTGTGAGCCAGAGGGGAGTGGT
TTCTGTTGGGAGCCCTGGCAGCTGA
    
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Restriction Sites: SgfI-MluI

ACCN: NM_001289404

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001289404.1</u> , <u>NP_001276333.1</u>
RefSeq Size:	3639 bp
RefSeq ORF:	2616 bp
Locus ID:	64210
UniProt ID:	<u>Q96T76</u>
Cytogenetics:	10q24.1
Protein Families:	Druggable Genome, Transcription Factors
Gene Summary:	<p>Key component of the cytosolic iron-sulfur protein assembly (CIA) complex, a multiprotein complex that mediates the incorporation of iron-sulfur cluster into apoproteins specifically involved in DNA metabolism and genomic integrity. In the CIA complex, MMS19 acts as an adapter between early-acting CIA components and a subset of cellular target iron-sulfur proteins such as ERCC2/XPD, FANCI and RTEL1, thereby playing a key role in nucleotide excision repair (NER), homologous recombination-mediated double-strand break DNA repair, DNA replication and RNA polymerase II (POL II) transcription (PubMed:22678362, PubMed:22678361, PubMed:29225034, PubMed:23585563). As part of the mitotic spindle-associated MMXD complex, plays a role in chromosome segregation, probably by facilitating iron-sulfur cluster assembly into ERCC2/XPD (PubMed:20797633). Indirectly acts as a transcriptional coactivator of estrogen receptor (ER), via its role in iron-sulfur insertion into some component of the TFIIH-machinery (PubMed:11279242).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (3) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation from a downstream start codon, compared to variant 1. This results in an isoform (3) that has a shorter N-terminus, compared to isoform 1.</p>