

## Product datasheet for **SC110945**

### **MCM6 (NM\_005915) Human Untagged Clone**

#### **Product data:**

|                           |                                       |
|---------------------------|---------------------------------------|
| Product Type:             | Expression Plasmids                   |
| Product Name:             | MCM6 (NM_005915) Human Untagged Clone |
| Tag:                      | Tag Free                              |
| Symbol:                   | MCM6                                  |
| Synonyms:                 | MCG40308; Mis5; P105MCM               |
| Mammalian Cell Selection: | None                                  |
| Vector:                   | <u><a href="#">pCMV6-XL5</a></u>      |
| E. coli Selection:        | Ampicillin (100 ug/mL)                |



[View online »](#)

Fully Sequenced ORF: >OriGene ORF within SC110945 sequence for NM\_005915 edited (data generated by NextGen Sequencing)

```
ATGGACCTCGCGGCGGCAGCGGAGCCGGGCGCCGGCAGCCAGCACCTGGAGGTCCGCGAC
GAGGTGGCCGAGAAGTGCCAGAACTGTTCTGGACTTCTTGGAGGAGTTTCAGAGCAGC
GATGGAGAAATTAATACTTGAATTAGCAGAGGAACTGATTCGTCTGAGAGAAACACA
TTGGTTGTGAGTTTTGTGGACCTGGAACAATTTAACAGCAACTTCCACCACCATTCAA
GAGGAGTCTATAGAGTTTACCCTTACCTGTGTGCGGGCCTTGAAAACATTCGTCAAAGAC
CGTAAAGAGATCCCTCTTGCCAAGGATTTTTATGTTGCATTCCAAGACCTGCCTACCAGA
CACAAGATTTCAGAGCTCACCTCATCCAGAATTGGTTTGCTCACTCGCATCAGTGGGCAG
GTGGTGGGACTCACCCAGTTCACCCAGAGCTTGTGAGCGGAACTTTTCTGTGCTTGGAC
TGTGAGACAGTATCAGGGATGTAGAACAGCAGTTCAAAACACACAGCCAAACATCTGC
CGAAATCCAGTTTGTGCCAACAGGAGGAGATTCTTACTGGATACAATAAATCAAGATTT
GTTGATTTTCAAAGGTTTGTATTCAAGAGACCCAAGCTGAGCTTCTCGAGGGAGTATC
CCCCGAGTTTAGAAGTAATTTTAAAGGGCTGAAGCTGTGGAATCAGCTCAAGCTGGTGAC
AAGTGTGACTTTACAGGGACACTGATTGTTGTGCCTGACGTCTCCAAGCTTAGCACACCA
GGAGCACGTGCAGAACTAATCCCGTGTCAAGTGGTGTGATGGATATGAGACAGAAAGGC
ATTCGAGGACTCCGGGCCCTTGGTGTAGGGACCTTTCTTATAGGCTGGTCTTTCTTGCC
TGCTGTGTTGCGCCAACCAACCAAGGTTTGGGGGAAAGAGCTCAGAGATGAGGAACAG
ACAGCTGAGAGCATTAAAGAACCAATGACTGTGAAAGAATGGGAGAAAGTGTGTTGAGATG
AGTCAAGATAAAAATCTATACCACAATCTTTGTACCAGCTGTTCCCTACTATACATGGC
AATGATGAAGTAAACCGGGTGTCTGTGATGCTCTTTGGTGGCGTTCCAAAGACAACA
GGAGAAGGGACCTCTCTCGAGGGGACATAAATGTTTGCATTGTTGGTGACCCAAGTACA
GCTAAGAGCCAAATTTCTCAAGCACGTGGAGGAGTTCAGCCCAGAGCTGTCTACACCAGT
GGTAAAGCGTCCAGTGTCTGGCTTAAACAGCAGCTGTTGTGAGAGATGAAGAATCTCAT
GAGTTTGTCAATTGAGGCTGGAGCTTTGATGTTGGCTGATAATGGTGTGTTGATTGAT
GAATTTGATAAGATGGACGTGCGGGATCAAGTTGCTATTGATGAAGCTATGGAACAGCAG
ACCATATCCATCACTAAAGCAGGAGTGAAGGCTACTCTGAACGCCCGGACGTCCATTTTG
GCAGCAGCAAACCAATCAGTGGACACTATGACAGATCAAATCATTGAAACAGAATATA
AATTTGTCAGCTCCCATCATGTCCCGATTTCGATCTCTTCTTTATCCTTGTGGATGAATGT
AATGAGGTTACAGATTATGCCATTGCCAGGCGCATAGTAGATTTGCATTCAAGAATTGAG
GAATCAATTGATCGTGTCTATCCCTCGATGATATCAGAAGATATCTTCTTTTGAAGA
CAGTTTAAACCAAGATTTCCAAGAGTCAAGAGACTTCAATTGTGGAGCAATATAAACAT
CTCCGCCAGAGAGATGGTTCTGGAGTGACCAAGTCTTCATGGAGGATTACAGTGGCAGAC
CTTGAGAGCATGATTCGTCTCTGAAGCTATGGCTCGGATGCACTGCTGTGATGAGGTC
CAACCTAAACATGTGAAGGAAGCTTTCCGGTACTGAATAAATCAATCATCCGTGTGGAA
ACACCTGATGTCAATCTAGATCAAGAGGAAGAGATCCAGATGGAGGTAGATGAGGGTGTCT
GGTGGCATCAATGGTCACTGCTGACAGCCCTGCTCCTGTGAACGGGATCAATGGCTACAAT
GAAGACATAAATCAAGAGTCTGCTCCAAAGCCTCCTTAAAGGCTGGGCTTCTCTGAGTAC
TGCCGAATCTCTAACCTTATTGTGCTTACCTCAGAAAGGTGGAAGAAGAAGAGGACGAG
TCAGCATTAAAGAGGAGCGAGCTTGTAACTGGTACTTGAAGGAAATCGAATCAGAGATA
GACTCTGAAGAAGAATTATAAATAAAAAAAGAATCATAGAGAAAGTTATTTCATCGACTC
ACACACTATGATCATGTTCTAATTGAGCTCACCCAGGCTGGATTGAAAGGCTCCACAGAG
GGAAGTGAGAGCTATGAAGAAGATCCCTACTTGGTAGTTAACCTAACTACTTGTCTCGAA
GATTGA
```

Clone variation with respect to NM\_005915.4

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_005915 unedited  
 NATTTTGTAAACGACTCACTATAGGGGCGGCCGCAATTTCGCACGAGGGCGGCGCGCGC  
 AAAGCTGCAGCGTCTGGAAAAACGACTTGTGGCGGTGAGCGTGGCGCAGGCGAATCCT  
 CGGCACTAAGCAAATATGGACCTCGCGGCGGCAGCGGAGCCGGGCGCCGGCAGCCAGCAC  
 CTGGAGGTCGCGACGAGGTGGCCGAGAAGTCCAGAACTGTTCTTGACTTCTTGAG  
 GAGTTTCAGAGCAGCGATGGAGAAATTAATACTTGAATTAGCAGAGGAACTGATTCGT  
 CCTGAGAGAAACACATTGGTTGTGAGTTTGTGGACCTGGAACAATTTAACCCAGCACTT  
 TCCACCACCATTCAAGAGGAGTTCTATAGAGTTTACCCTTACCTGTGTCGGGCCTTGAAA  
 ACATTCGTCAAAGACCGTAAAGAGATCCCTCTTGCCAAGGATTTTTATGTTGCATTCCAA  
 GACCTGCCTACCAGACACAAGATTTCGAGAGCTCACCTCATCCAGAATTGGTTTGCTCACT  
 CGCATCAGTGGGCAGGTGGTGGGACTCACCCAGTTCACCCAGAGCTTGTGAGCGGAACT  
 TTTCTGTGCTTGGACTGTCAGACAGTGATCAGGGATGTAGAACAGCAGTTCAAATACACA  
 CAGCCAAACATCTGCCAAATCCAGTTTGTCCAACAGGAGGAGATTCTTACTGGATACA  
 NNATAATCAAGATTTGTTGATTTTCAAAGGGTCTGATTCAAGAGACCCAGCTGAGCTT  
 CCTCGAGGGAGTATCCCCCGAGTTTAGAAGTAATTTAGGGCTGAAGCTGTGGAATCAG  
 CTAAGCTGGTGACCAGTGTGACTTTAAGGGACACCTGATGTTGTGCCTGACGTCTCCAA  
 GCTTACACCACCAGCCGTGCAGAAACTAANTCCCTGTACGGTGGTGTGAATGAAA  
 CCAAGGCTTCCAGACTCCGCCCT

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_005915 unedited  
 GGACCGCGGCACGCAATCTATAGTCGAGNNNTTTTTTTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTTTTTTTTTTTTAAAAACAAGTTTTTTTATTTTGATAAATAAAAGCAGTACCTGGC  
 ATTGGAATAAAGTTTTTTGCTCAATAGGACAGCACATCCCTTAAAAGTAAGGGGCTTT  
 TTTTACACATGAAAAACAAGGTTTGGGTATAAAAACTACACTTTTTTGGGTTCCAAC  
 TCCTGGGACAGGAAACACCCCAAAGGAAGGGCTGAACCTGGGTGGGTATAAAACCTGG  
 GATGAATGGGACACATAGGACCTTCAACTATTCTTGTTTCTGAAAACAAATCCGGGAA  
 GCATCACTTCAAAAACATTTCTGCCCTAAAAAGCTCCAGCCAGGCTCCAGGCCACGA  
 GGGGCTGGGCCACAGTTCCTCAGCTCTGGCCAGTACTTCACTATCTAAATCTTCAAGC  
 AAGTATTTAGGGTAACTACCAAGTAGGGATCTTCTTCATAGCTCTCACTTCCCTCGGG  
 GAGCCTTTCAATCCAGCCGGGGGAGCTCAATTAACATGATCATAGGGGGGAGCCGA  
 TAAATAACTTTCTATGATCCTTTTTTTTATAATAAGCTCTTCTTAAAAGTCTATCTCT  
 GATTCGATTTCTTCAAGCACCAGTTAAACAAGCTCGCTCCTTTTAAATGCAGACTTGCC  
 TCTTCTTCTACACCCTTGTGAGGGGAACCACATAAGGTAGAGATTCGGCAGTCTCAA  
 AAACCCACCTTAAAGGAGGCTTGGGAGCAAACCTTGTATTTATGTCTTCTTGAACCAT  
 TGATCCCCTTCAAGAACAGGGCTGCANCATAACCTTGGTGCCACCAACACCTATTAC  
 CTCATTGGGATTTCTTCTCGGATCTAAATGAAACAGGGGTTCCACCCGTTGAATGATTT  
 TTTAGTACGCGAGCTCCTCCATGTTAGGGGAACCTATCCAGAAGGCTCCACCATATTTA  
 AG

**Restriction Sites:**

ECoRI-NOT

**ACCN:**

NM\_005915

**Insert Size:**

3080 bp

**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).

|                               |  |
|-------------------------------|--|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>  |
| <b>RefSeq:</b>                | <a href="#">NM_005915.4</a> , <a href="#">NP_005906.2</a>  |
| <b>RefSeq Size:</b>           | 3769 bp  |
| <b>RefSeq ORF:</b>            | 2466 bp  |
| <b>Locus ID:</b>              | 4175   |
| <b>UniProt ID:</b>            | <a href="#">Q14566</a>   |
| <b>Cytogenetics:</b>          | 2q21.3   |
| <b>Domains:</b>               | MCM  |
| <b>Protein Families:</b>      | Stem cell - Pluripotency, Transcription Factors  |
| <b>Protein Pathways:</b>      | Cell cycle, DNA replication  |
| <b>Gene Summary:</b>          | <p>The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. The MCM complex consisting of this protein and MCM2, 4 and 7 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. The phosphorylation of the complex by CDC2 kinase reduces the helicase activity, suggesting a role in the regulation of DNA replication. Single nucleotide polymorphisms in the intron regions of this gene are associated with differential transcriptional activation of the promoter of the neighboring lactase gene and, thereby, influence lactose intolerance in early adulthood. [provided by RefSeq, May 2012]</p> |