

Product datasheet for **SC323955**

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:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_005915.4
 CCACGCGTCCGGTGGCGGTCGAGCGTGGCGTAGGCGAATCCTCGGCACTAAGCATATGGA
 CCTCGCGCGGCAGCGGAGCCGGCGCCGCGCAGCCAGCACCTGGAGGTCGCGACGAGGT
 GGCCGAGAAGTGCCAGAACTGTTCTTGACTTCTTGGAGGAGTTTCAGAGCAGCGATGG
 AGAAATTAATACTTGC AATTAGCAGAGAACTGATTCGTCCTGAGAGAAACACATTGGT
 TGTGAGTTTTGTGGACCTGGAACAATTTAACCAGCAACTTTCCACCACCATTC AAGAGGA
 GTTCTATAGAGTTTACCCTTACCTGTGTCGGGCCTTGAAAACATTCGTC AAGACCGTAA
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 GATTCGAGAGCTCACCTCATCCAGAATTGGTTTGCTCACTCGCATCAGTGGGCAGGTGGT
 GCGGACTCACCCAGTTCACCCAGAGCTTGTGAGCGGAACTTTTCTGTGCTTGGACTGTCA
 GACAGTGATCAGGGATGTAGAACAGCAGTTC A AATACACACAGCCAACATCTGCCGAAA
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AAAAAAAAAAAAAAAAAAAAAAAAAAAA

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- Restriction Sites:** ECoRI-NOT
- ACCN:** NM_005915
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_005915.4](#), [NP_005906.2](#)

RefSeq Size: 3769 bp

RefSeq ORF: 2466 bp

Locus ID: 4175

UniProt ID: [Q14566](#)

Cytogenetics: 2q21.3

Domains: MCM

Protein Families: Stem cell - Pluripotency, Transcription Factors

Protein Pathways: Cell cycle, DNA replication

Gene Summary: 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]