OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC111824

MCM10 (NM_018518) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM10 (NM_018518) Human Untagged Clone
Tag:	Tag Free
Symbol:	MCM10
Synonyms:	CNA43; DNA43; PRO2249
Mammalian Cell Selection:	None
Vector:	pCMV6-XL6
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_018518, the custom clone sequence may differ by one or more nucleotides

ATGGATGAGGAGGAAGACAATCTGTCTCTGCTGACCGCACTGCTGGAAGAAAATGAGTCAGCCTTGGATT
GTAATTCAGAAGAAAATAACTTCTTGACGCGGGAAAATGGCGAGCCCGACGCATTTGATGAGCTCTTTGA
TGCCGACGGCGACGGTGAATCTTATACAGAAGAGGCTGATGATGGAGAAACAGGAGAGACAAGAGACGAA
AAGGAAAATCTGGCCACTCTCTTTGGAGATATGGAGGACTTAACAGATGAAGAAGAAGTTCCCGCATCAC
AGTCAACTGAAAATAGGGTCCTCCCTGCTCCTGCCCCCAGGCGAGAGAAAACGAATGAAGAGTTGCAAGA
GGAATTAAGGAATTTGCAAGAGCAAATGAAGGCCTTACAAGAGCAGCTAAAAGTAACAACAATTAAACAG
ACAGCAAGCCCAGCCCGTCTGCAAAAATCCCCTGAGAAGTCTCCCCGGCCACCTCTTAAGGAGAGGAGAG
TTCAGAGAATTCAGGAGTCAACATGCTTTTCTGCGGAGCTTGATGTCCCTGCGCTACCAAGAACCAAGAG
GGTGGCTCGAACACCAAAGGCTTCACCTCCAGATCCCAAAAGCTCATCTTCAAGGATGACAAGTGCACCC
TCCCAACCCCTACAGACGATTTCTCGGAACAAACCTAGTGGGATAACTAGAGGTCAAATTGTGGGGACCC
CAGGAAGTTCTGGGGAAACGACTCAACCCATCTGTGTGGAAGCCTTCTCTGGTCTGCGGCTCAGGCGGCC
TCGAGTATCCTCCACAGAAATGAACAAGAAAATGACCGGCCGAAAACTGATCAGACTGTCTCAGATCAAG
GAAAAGATGGCCAGAGAGAAGCTGGAAGAAATAGATTGGGTGACATTTGGGGTTATATTGAAGAAGGTTA
CGCCACAGAGTGTGAATAGTGGAAAAACCTTCAGCATATGGAAACTGAATGATCTTCGTGACCTGACACA
ATGTGTGTCCTTGTTCTTATTTGGAGAAGTTCACAAAGCGCTCTGGAAGACGGAGCAGGGGACTGTCGTA
GGGATCCTCAATGCCAACCCCATGAAGCCCAAGGATGGTTCAGAGGAGGTGTGTTTATCTATCGATCATC
CTCAGAAGGTCTTAATTATGGGTGAAGCTCTTGACCTGGGAACCTGTAAAGCCAAGAAGAAGAATGGAGA
GCCGTGCACGCAGACTGTGAATTTGCGTGACTGTGAGTACTGTCAGTACCATGTCCAGGCTCAGTACAAG
AAGCTCAGCGCAAAGCGTGCGGATCTGCAGTCCACCTTCTCTGGAGGACGAATTCCAAAGAAGTTTGCCC
GCAGAGGCACCAGCCTCAAAGAACGGCTGTGCCAAGATGGCTTTTACTACGGAGGGGTTTCTTCTGCCTC
GTATGCAGCTTCAATTGCAGCAGCTGTGGCTCCTAAGAAGAAGATTCAAACCACTCTGAGTAATCTGGTT
GTTAAGGGCACAAACTTGATCATCCAGGAAACACGGCAAAAACTCGGAATACCCCAGAAGAGCCTGTCTT
GCTCTGAGGAGTTCAAGGAACTGATGGACCTGCCGACGTGTGGAGCCAGGAACTTAAAACAACATTTAGC
CAAAGCCACAGCTTCAGGGATTATGGGGAGCCCAAAACCAGCCATCAAGTCCATCTCGGCCTCAGCACTC
TTGAAGCAACAGAAGCAGCGGATGTTGGAGATGAGGAGAAGGAAATCAGAAGAAATACAGAAGCGATTTC
TGCAGAGCTCAAGTGAAGTTGAGAGCCCAGCTGTGCCATCTTCATCAAGACAGCCCCCTGCTCAGCCTCC
ACGGACAGGATCCGAGTTCCCCAGGCTGGAGGGAGCCCCGGCCACAATGACGCCCAAGCTGGGGCGAGGT
GTCTTGGAAGGAGATGATGTTCTCTTTTATGATGAGTCACCACCACCAAGACCAAAACTGAGTGCTTTAG
CAGAAGCCAAAAAGTTAGCTGCTATCACCAAATTAAGGGCAAAAGGCCAGGTTCTTACAAAAACAAACCC
AAACAGCATTAAGAAGAAACAAAAGGACCCTCAGGACATCCTGGAGGTGAAGGAACGTGTAGAAAAAAAC
ACCATGTTTTCTTCTCAAGCTGAGGATGAATTGGAGCCTGCCAGGAAAAAAAGGAGAGAACAACTTGCCT
ATCTGGAATCTGAGGAATTTCAGAAAATCCTAAAAGCAAAATCAAAACACACAGGCATCCTGAAAGAGGC
CGAGGCTGAGATGCAGGAGCGCTACTTTGAGCCACTGGTGAAAAAAGAACAAATGGAAGAAAAGATGAGA
AACATCAGAGAAGTGAAGTGCCGTGTCGTGACATGCAAGACGTGCGCCTATACCCACTTCAAGCTGCTGG
AGACCTGCGTCAGTGAGCAGCATGAATACCACTGGCATGATGGTGTGAAGAGGTTTTTCAAATGTCCCTG
TGGAAACAGAAGCATCTCCTTGGACAGACTCCCGAACAAGCACTGCAGTAACTGTGGCCTCTACAAATGG
GAACGGGACGGAATGCTAAAGGAAAAGACTGGTCCAAAGATAGGAGGAGAAACTCTGTTACCAAGAGGAG
AAGAACATGCTAAATTTCTGAACAGCCTTAAATAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_018518 unedited
NTTTTACCCCCGCCCGTTGNCGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATA
AGCAGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTTCTTTTTGCAGCGGCC
GCGAATTCGGCACGAGGCGGCATCGGCCAAGATTCTACATTGCTCATCTGGGCATCTGAG
CCTCCTTCGAAGTTTCCTGTCACAACTGTCCTCTTGACAGCATGGATGAGGAGGAAGACA
ATCTGTCTCTGCTGACCGCACTGCTGGAAGAAAATGAGTCAGCCTTGGATTGTAATTCAG
AAGAAAATAACTTCTTGACGCGGGAAAATGGCGAGCCCGACGCATTTGATGAGCTCTTTG
ATGCCGACGGCGACGGTGAATCTTATACAGAAGAGGCTGATGATGGAGAAACAGGAGAGA
CAAGAGACGAAAAGGAAAATCTGGCCACTCTCTTTGGAGATATGGAGGACTTAACAGATG
AAGAAGAAGTTCCCGCATCACAGTCAACTGAAAATAGGGTCCTCCCTGCTCCTGCCCCCA
GGCGAGAGAAAACGAATGAAGAGTTGCAAGAGGAATTAAGGAATTTGCAAGAGCAAATGA
AGGCCTTACAAGAGCAGCTAAAAGTAACAACAATTAAACAGACAGCAAGCCCAGCCCGTC
TGCAAAAATCCCCTGAGAAGTCTCCCCGGCCACCTCTTAAGGAGAGGAGAGTTCAGAGAT
TTCAGGAGTCAACATGCTTTTCTGCGGAGCTTGATGTCCCTGCGCTACCAAAACCAAGAA
GGTGGCTCGAACCCCAAAGGCTTCACCTCCCTATCCCAAAGCTCATCTTTCAGGGAGACA
AGTGCACCCTCCCACCCCTACAGACGATTTTTCGGACAAACCTATGGGATAACTACAAGG
CAAATGTTGGGGACCCCAGCAAT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_018518 unedited
NNGGGTACCACTATGNACCCGGNCCGCAANCTANGATCGNATTTTTTTTTTTTTTTTTTG
GAAGCAAAGTGGGTGGATTGCTAGTGCTCAGGAGTTTGAGACCAGCCTGAGCAACATGGC
AAAACCCCATCTCTACAAAAAATGCAAAAATTAGCTGGGCTTGGTCACGCACGCCTGTAG
TCCTAGCTATTTGGGAGACTGAGGTGGGAGGACTGCTTGAGCCCAGGGAAGCCAAGGCTG
CAGTGTGCCGCGATCGCACTACTGCACTCCAGCCAGGGTGACATAGTGAGACCCTGTCAT
AAAAAATAAAAAAATTAAAAAAAAAATAATATGAGATTTTACATATTTCTATCACAGGGC
TCCACAATAATGTAAGAGCAGACAGCCTTCTTTCTCTCTCTATATATAAACTGAAATGCA
AAGTGATTCAGTGGCTTGATCAATTTTCAAGAGTAAAACAGAGATAACAGAATTGAATGA
AGAAATCTGGCTTTTAATGGCCCTACATAAAGACTATGTGATCATCATTATCTAGATGGG
AAAGTTTTATTATTTGTAGAAATCCCCTGCTTAAAAAAACATTTTAAGGAATCCTTAATC
CCAACTTCCCGGATTTTCACGATGAAAAAACCGAAGCCCCAAAATTAAACTATTTACCTG
GGAGGGGGAAAAAACCCCAATTTTTTTGCCCCTTGGGGGGTGTCATAAAACACTAAAGAT
TTTGTTATTGTTAAAAAAGTGAACACCTTTTTTAACCAAAAGATAACGAAACCTCCCCCC
CTTTGGTAACCCCCCCCATTTTTGGCCCCTAAACTCTTTGGATGAAATAAGCGCACTCTA
CACCCCGTGGTTTTTTATAAAACATATTTACCTTGGGTTCCCCCTTAAGGAGGAG

Restriction Sites: NotI-NotI

ACCN: NM_018518

Insert Size: 3500 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).

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_018518.3, NP_060988.3
RefSeq Size:	4532 bp
RefSeq ORF:	2625 bp
Locus ID:	55388
UniProt ID:	Q7L590
Cytogenetics:	10p13
Protein Families:	Stem cell - Pluripotency
Gene Summary:	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre-RC) and it may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein can interact with MCM2 and MCM6, as well as with the origin recognition protein ORC2. It is regulated by proteolysis and phosphorylation in a cell cycle-dependent manner. Studies of a similar protein in Xenopus suggest that the chromatin binding of this protein at the onset of DNA replication is after pre-RC assembly and before origin unwinding. Alternatively spliced transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (2) encodes the predominant isoform (2).