

Product datasheet for **RG200208**

MCM3 (NM_002388) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM3 (NM_002388) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCM3
Synonyms:	HCC5; P1-MCM3; P1.h; RLFB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG200208 representing NM_002388
Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGGATCGCC**

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ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG200208 representing NM_002388
 Red=Cloning site Green=Tags(s)

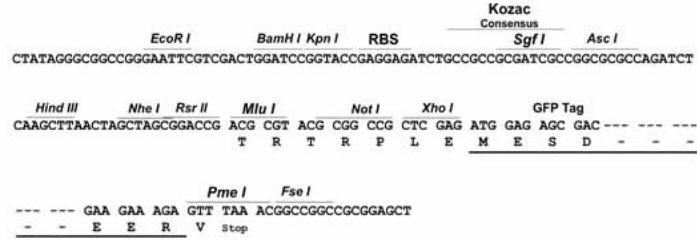
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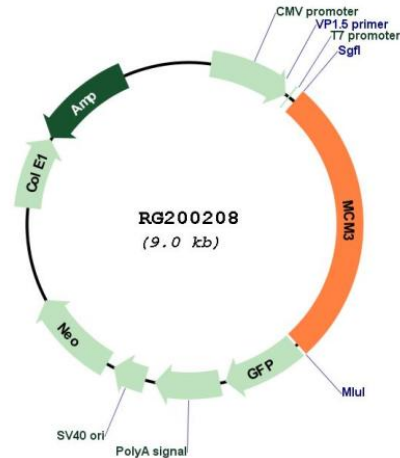
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_002388

ORF Size: 2424 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_002388.6](#)

RefSeq Size:	3143 bp
RefSeq ORF:	2427 bp
Locus ID:	4172
UniProt ID:	P25205
Cytogenetics:	6p12.2
Domains:	MCM, AAA
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Cell cycle, DNA replication
Gene Summary:	<p>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 may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein is a subunit of the protein complex that consists of MCM2-7. It has been shown to interact directly with MCM5/CDC46. This protein also interacts with and is acetylated by MCM3AP, a chromatin-associated acetyltransferase. The acetylation of this protein inhibits the initiation of DNA replication and cell cycle progression. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2018]</p>