

## Product datasheet for RC201047

### CENPM (NM\_024053) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CENPM (NM\_024053) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** CENPM  
**Synonyms:** C22orf18; CENP-M; PANE1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC201047 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGTCGGTGTTGAGGCCCTGGACAAGCTGCCCGCCTGAACACGGCCACCATCTTGCTGGTGGGCACGG  
 AGGATGCTCTTCTGCAGCAGCTGGCGGACTCGATGCTCAAAGAGGACTGCGCCTCCGAGCTGAAGGTCCA  
 CTTGGCAAAGTCCCTCCCTTTGCCCTCCAGTGTGAATCGGCCCGAATTGACCTGATCGTGTGTTGTGGTT  
 AATCTTCACAGCAAATACAGTCTCCAGAACACAGAGGAGTCCCTGCGCCATGTGGATGCCAGCTTCTCT  
 TGGGGAAGGTGTGTTTCTCGCCACAGGTGCTGGGCGGGAGAGCCACTGCAGATTACCCGGCACACCGT  
 GGTGAAGCTGGCCACACCTATCAAAGCCCCCTGCTCTACTGTGACCTGGAGGTGAAGGCTTTAGGGCC  
 ACCATGGCGCAGCGCTGGTGCCTGTGTCAGATCTGTGCTGGCCACGTGCCCGGTGTCTCAGCTCTGA  
 ACCTGCTGTCCCTGCTGAGAAGCTCTGAGGGCCCTCCCTGGAGGACCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC201047 protein sequence  
 Red=Cloning site Green=Tags(s)

MSVLRPLDKLPGLNTATILLVGTEALLQQLADSMKEDCASELKVHLAKSLPLSSVNRPRIDLIVFVV  
 NLHYSKYSLQNTESLRHVDASFFLGKVCFLATGAGRESHCSIHRHTVVKLAHTYQSPLLYCDLEVEGFRA  
 TMAQRLVRVLQICAGHVPGVSALELLSLLRSSEGPSLEDL

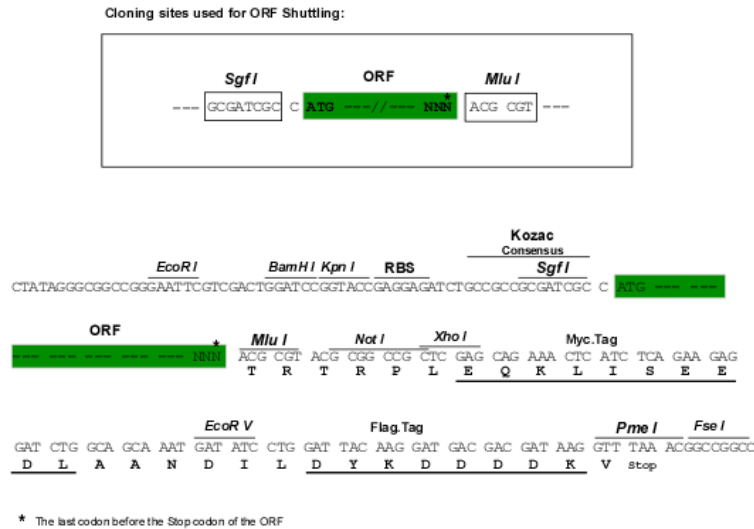
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6573\\_d12.zip](https://cdn.origene.com/chromatograms/mk6573_d12.zip)


[View online »](#)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_024053

**ORF Size:** 540 bp

**OTI Disclaimer:** 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_024053.5](#)

**RefSeq Size:** 947 bp

**RefSeq ORF:** 543 bp

Locus ID: 79019

UniProt ID: [Q9NSP4](#)

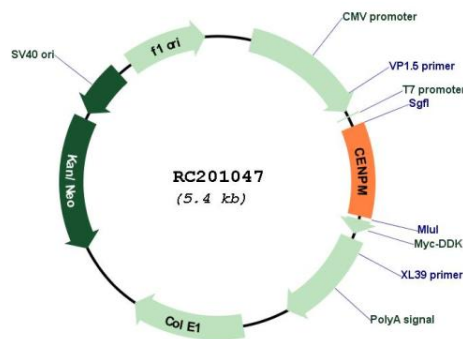
Cytogenetics: 22q13.2

Protein Families: Druggable Genome

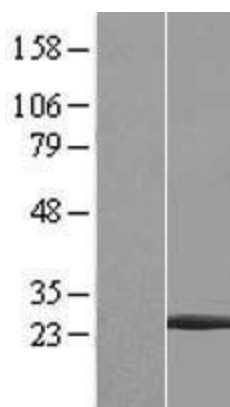
MW: 19.7 kDa

**Gene Summary:** The protein encoded by this gene is an inner protein of the kinetochore, the multi-protein complex that binds spindle microtubules to regulate chromosome segregation during cell division. It belongs to the constitutive centromere-associated network protein group, whose members interact with outer kinetochore proteins and help to maintain centromere identity at each cell division cycle. The protein is structurally related to GTPases but cannot bind guanosine triphosphate. A point mutation that affects interaction with another constitutive centromere-associated network protein, CENP-I, impairs kinetochore assembly and chromosome alignment, suggesting that it is required for kinetochore formation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2015]

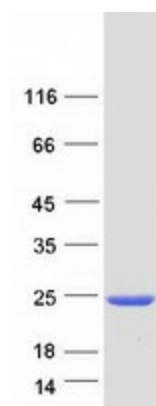
## Product images:



Circular map for RC201047



Western blot validation of overexpression lysate (Cat# [LY411372]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201047 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CENPM protein (Cat# [TP301047]). The protein was produced from HEK293T cells transfected with CENPM cDNA clone (Cat# RC201047) using MegaTran 2.0 (Cat# [TT210002]).