

## **Product datasheet for RC212209**

# **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

# CENPM (NM\_001002876) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** CENPM (NM\_001002876) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: CENPM

Synonyms: C22orf18; CENP-M; PANE1

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC212209 representing NM\_001002876
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

TGGGGAAGGTGTTTTCCTCGCCACAGGTGGTGGAAGGCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212209 representing NM\_001002876

Red=Cloning site Green=Tags(s)

MSVLRPLDKLPGLNTATILLVGTEDALLQQLADSMLKEDCASELKVHLAKSLPLPSSVNRPRIDLIVFVV

NLHSKYSLQNTEESLRHVDASFFLGKVCFLATGGGRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

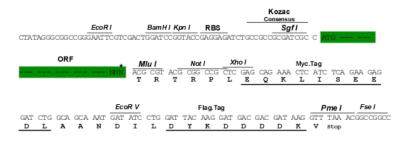
**Restriction Sites:** Sgfl-Mlul





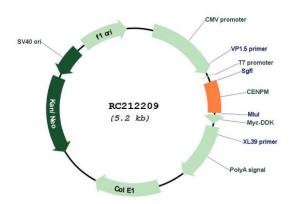
#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_001002876

ORF Size: 321 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



### CENPM (NM\_001002876) Human Tagged ORF Clone - RC212209

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:** <u>NM 001002876.2</u>

RefSeq Size: 855 bp
RefSeq ORF: 324 bp
Locus ID: 79019
UniProt ID: Q9NSP4
Cytogenetics: 22q13.2

**Protein Families:** Druggable Genome

**MW:** 11.5 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]