

Product datasheet for **MR222004**

Cenpw (NM_001109747) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cenpw (NM_001109747) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cenpw
Synonyms: 2610036L11Rik; Cug2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR222004 representing NM_001109747
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGGCGCCCTCCACCACAGTCACTAGGCGGGTAAAGCGCAAGGCGCCCCGCGCCTTCCTCAAGCGCACCT
TAAAGCAGAAGAAGCCTCACCTAGGTCTGGGGAGGTGCTGCGACCTCCTGATCCATTGAATTGCCTACT
TTTTATTCAGCGATTGGCAGAAGAGTCCAGGACAAATGCTTGTAAGTAAATCTAGAGTTATCAAAAAG
GATCATGTACTGGCTGCAGGAAAGTAATTCTGAAGAAGAGCAGAGGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222004 representing NM_001109747
Red=Cloning site Green=Tags(s)

MAPSTTVTRRVKRKAPRAFLKRTLKQKKPHLGLGRCCDLLIHLNCLLFIQRLAEEESRTNACESKSRVIKK
 DHVLAAGKVILKKSRG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9042_b12.zip

Restriction Sites: SgfI-MluI


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Cloning Scheme:



ACCN: NM_001109747

ORF Size: 258 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_001109747.1](#), [NP_001103217.1](#)

RefSeq Size: 1527 bp

RefSeq ORF: 261 bp

Locus ID: 66311

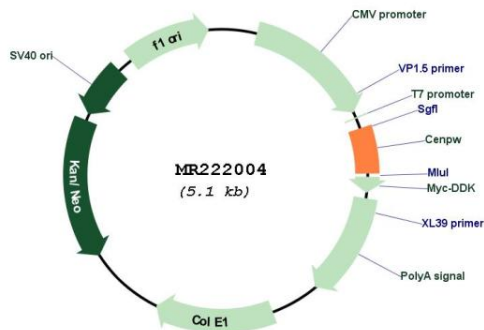
UniProt ID: [Q3URR0](#)

Cytogenetics: 10 A4

MW: 10.2 kDa

Gene Summary: Component of the CENPA-NAC (nucleosome-associated) complex, a complex that plays a central role in assembly of kinetochore proteins, mitotic progression and chromosome segregation (By similarity). The CENPA-NAC complex recruits the CENPA-CAD (nucleosome distal) complex and may be involved in incorporation of newly synthesized CENPA into centromeres (By similarity). Part of a nucleosome-associated complex that binds specifically to histone H3-containing nucleosomes at the centromere, as opposed to nucleosomes containing CENPA. Component of the heterotetrameric CENP-T-W-S-X complex that binds and supercoils DNA, and plays an important role in kinetochore assembly. CENPW has a fundamental role in kinetochore assembly and function. It is one of the inner kinetochore proteins, with most further proteins binding downstream. Required for normal chromosome organization and normal progress through mitosis (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222004