

# **Product datasheet for RC220318**

### OriGene Technologies, Inc.

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# C6ORF173 (CENPW) (NM\_001012507) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** C6ORF173 (CENPW) (NM\_001012507) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: C6ORF173

Synonyms: C6orf173; CENP-W; CUG2

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC220318 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

AACAAGGAGCATGTACTGGCCGCAGCAAAGGTAATTCTAAAGAAGAGCAGAGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA** 

Protein Sequence: >RC220318 protein sequence

Red=Cloning site Green=Tags(s)

MALSTIVSQRKQIKRKAPRGFLKRVFKRKKPQLRLEKSGDLLVHLNCLLFVHRLAEESRTNACASKCRVI

NKEHVLAAAKVILKKSRG

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6455">https://cdn.origene.com/chromatograms/mk6455</a> h02.zip

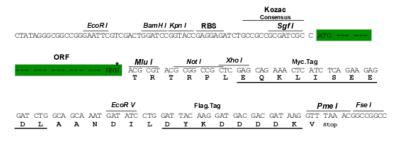
Restriction Sites: Sgfl-Mlul





#### **Cloning Scheme:**





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

**ACCN:** NM\_001012507

ORF Size: 264 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:** <u>NM 001012507.4</u>

RefSeq Size: 1135 bp



 RefSeq ORF:
 267 bp

 Locus ID:
 387103

 UniProt ID:
 Q5EE01

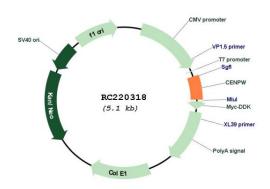
 Cytogenetics:
 6q22.32

 MW:
 10.1 kDa

**Gene Summary:** Component of the CENPA-NAC (nucleosome-associated) complex, a complex that plays a

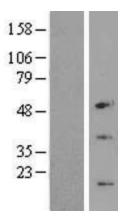
central role in assembly of kinetochore proteins, mitotic progression and chromosome segregation (By similarity). The CENPA-NAC complex recruits the CENPA-CAD (nucleosome distal) complex and may be involved in incorporation of newly synthesized CENPA into centromeres (By similarity). Part of a nucleosome-associated 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.[UniProtKB/Swiss-Prot Function]

# **Product images:**



Circular map for RC220318





Western blot validation of overexpression lysate (Cat# [LY422874]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220318 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).