

## Product datasheet for RC215240

### CENPU (NM\_024629) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CENPU (NM_024629) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CENPU
Synonyms:	CENP50; CENPU50; KLIP1; MLF1IP; PBIP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215240 representing NM_024629 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGCCCCGGGGGGCGGGCGGGCCGCGGCTCACAGGTCTGAGGGCGCAAGACGTTCAAAGAACACTT  
TAGAAAGAACACATTCCATGAAAGATAAAGCTGGTCAAAAGTGCAAGCCTATTGACGTGTTTCGACTTTCC  
TGATAATTCTGATGTCTCAAGCATTGGCAGGCTGGGTGAAATGAGAAAGATGAAGAACTTATGAGACC  
TTTGATCCTCCTTACATAGCACAGCTATATATGCTGATGAAGAAGAATTCTCCAACATTGTGGACTGT  
CTCTCTTCAACTCCTCCAGGAAAAGAAGCAAAAAGAAGTTCAGACACTTCTGGAAATGAAGCAAGTGA  
AATCGAATCTGTAATAAATTAGTGCAAAAAGCCAGGAAGAAAGCTCAGGCCATTAGTGACTCTGAA  
AGCATTGAAGAAAGTGATACAAGGAGAAAAGTTAAATCAGCAGAGAAAATAAGTACACAACGTCATGAGG  
TTATTCGAACCACAGCGTCTTCAGAACTTTCAGAGAAACCAGCTGAGTCTGTCACTTCTAAAAAGACAGG  
ACCCCTTAGTGCCAGCCCTCTGTTGAAAAAGAGAAGTGGCAATAGAAAGTCAATCGAAAACCTCAGAAA  
AAAGGGAAGATATCTCATGACAAAAGGAAGAAATCAAGAAGTAAAGCCATAGGCTCAGATACTTCTGACA  
TTGTGCACATTTGGTGTCCAGAAGGAATGAAAACCAAGTCAAGGAGTTGAATATTGTTTTGCCTGA  
ATTTGAGAAAACCCACCTAGAGCATCAACAAAGAATAGAATCTAAAGTTTGAAGGCAGCCATCGCCACA  
TTTTATGTTAATGTTAAAGAACAATTCATCAAAATGCTTAAAGAAAGCCAGATGTTGACAAATCTGAAA  
GGAAGAATGCTAAGATGATTTTCAGATATCGAAAAGAAAAGCAGCGTATGATTGAAGTCCAGGATGAAT  
GCTTCGGTTAGAGCCACAGCTGAAAACACTACAAACAAAATATGATGAACTTAAAGAGAGAAAGTCTTCC  
CTTAGGAATGCAGCATATTTCTTATCTAATTTAAACAGCTTTATCAAGATTATTCAGATGTTCAAGCTC  
AAGAACCAACGTAAGGAAACGTATGATTCATCCAGCCTTCCAGCTCTGTTATTTAAAGCAAGAACACT  
TCTGGGAGCCGAAAGCCATCTGCGAAATATCAACCATCAGTTAGAGAAGCTCCTTGACCAGGGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC215240 representing NM\_024629  
Red=Cloning site Green=Tags(s)

MAPRGRRRRPPHRSEGARRSKNTLERTHSMKDKAGQKCKPIDVDFDPNSDVSSIGRLGENEKDEETYET  
 FDPPLHSTAIYADEEEFKHCGLSLSSSTPPGKEAKRSSDTSGNEASEIESVKISAKKPGKRLRPISDDSE  
 SIEESDTRRKVKSAEKISTQRHEVIRTTASSELSEKPAESVTSKKTGPLSAQPSVEKENLAIESQSKTQK  
 KGKISHDKRKKRSKAIIGSDTSDIVHIWCPEGMKTSDIKELNIVLPEFEKTHLEHQRIESKVKAAIAT  
 FYVNVKEQFIKMLKESQMLTNLKRKNAMISDIEKKRQRMIEVQDELLRLEPQLKQLQTKYDELKERRKSS  
 LRNAAYFLSNLKQLYQDYSDVQAQEPNVKETYDSSSLPALLFKARTLLGAESHLRNINHQLKLLDQG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_024629

**ORF Size:** 1254 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](mailto: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\\_024629.4](#)

**RefSeq Size:** 2547 bp

**RefSeq ORF:** 1257 bp

**Locus ID:** 79682

**UniProt ID:** [Q71F23](#)

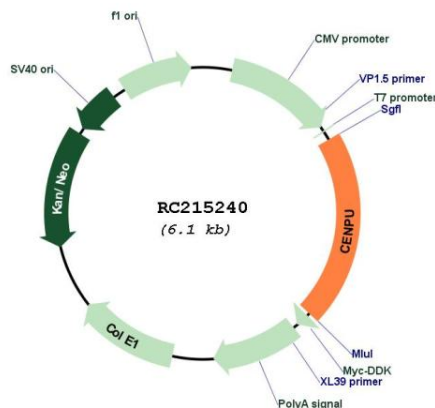
**Cytogenetics:** 4q35.1

**Protein Families:** Druggable Genome

**MW:** 47.3 kDa

**Gene Summary:** The centromere is a specialized chromatin domain, present throughout the cell cycle, that acts as a platform on which the transient assembly of the kinetochore occurs during mitosis. All active centromeres are characterized by the presence of long arrays of nucleosomes in which CENPA (MIM 117139) replaces histone H3 (see MIM 601128). MLF1IP, or CENPU, is an additional factor required for centromere assembly (Foltz et al., 2006 [PubMed 16622419]). [supplied by OMIM, Mar 2008]

### Product images:



Circular map for RC215240