

Product datasheet for **RC204531**

CENPH (NM_022909) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CENPH (NM_022909) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CENPH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204531 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAGCAGCCCCAGATGCAAGACGCCGACGAGCCCCGGACTCCGGAGGGGAAGGCCGGGCAGGCG
GGCCACCCGAGGTCGCCGGCGCCAGGCGGCGTGCAGCGAGGACCGCATGACCCTGCTCCTCAGGCTGAG
AGCACAGACAAAACAACAACCTTTAGAATATAAATCAATGGTTGATGCAAGTGAAGAAAAAATCCAGAA
CAAATTTATGCAAGAAAAGCAAATCGAAGCTAAAATTGAAGACCTGGAAAAATGAAATTTGAAGAGGTAAG
TTGTTTTGAGATAAAAAAGCTTGCAATAGACAGGATGAGACTTTCAACTGCACCTAAAAAATCTGGA
GAAAATTAGCAGACAGTCTAGTGTGCTCATGGATAACATGAAACACCTATTAGAGCTAAATAAATTAATA
ATGAAATCACAGCAGGAATCTTGGGATTTAGAGAAAAAATGCTTGATATTAGAAAGAAGAGATTGCAAT
TAAAAAAGCTTCAGAAAGTAAGCTTTTAGAAATACAGACTGAAAAGAACAACAGAAAGATTGATTTGGA
CAGTATGGAAAATCAGAGAGGATAAAGATCATAACGACAAAACCTACAGATGGAGATAAAAAATTACTACT
GTTATTCAACATGTGTTCCAGAACCTTATTTTGGGGAGTAAAGTCAATTGGGCAGAGGATCTGCCCTTA
AGGAAATTGTTCTGCAGCTTGAGAAGAATGTTGACATGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204531 protein sequence
 Red=Cloning site Green=Tags(s)

```
MEEQPQMQDADEPADSGGEGRAGGPPQVAGAQAACSEDRMTLLLRLRAQTKQLLEYKSMVDASEEKTPE
QIMQEKQIEAKIEDLENEIEEVKVAFEIKKLALDRMRLSTALKKNLEKISRQSSVLMDNMKHLELNKLI
MKSQQESWDLEEKLLDIRKKRLQLKQASESKLLEIQTEKNKQKIDLDMSENSERIKIIRQNLMQEIKITT
VIQHVFNQLILGSKVNWAEDPALKEIVLQLEKNVDMM
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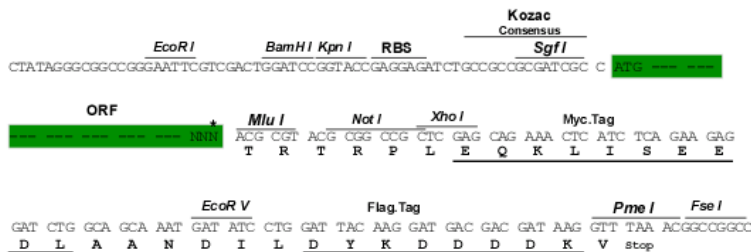
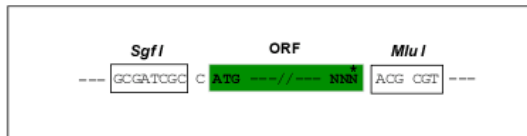
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6010_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_022909

ORF Size: 741 bp

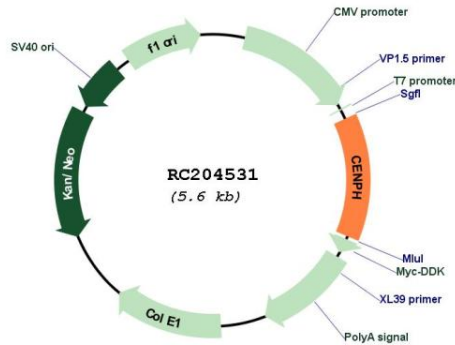
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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 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](#)

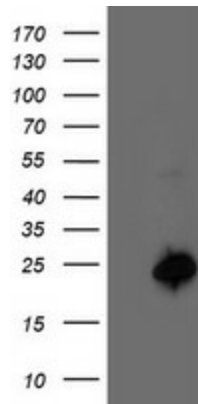
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_022909.4
RefSeq Size:	1405 bp
RefSeq ORF:	744 bp
Locus ID:	64946
UniProt ID:	Q9H3R5
Cytogenetics:	5q13.2
Protein Families:	Druggable Genome
MW:	28.5 kDa
Gene Summary:	Centromere and kinetochore proteins play a critical role in centromere structure, kinetochore formation, and sister chromatid separation. The protein encoded by this gene colocalizes with inner kinetochore plate proteins CENP-A and CENP-C in both interphase and metaphase. It localizes outside of centromeric heterochromatin, where CENP-B is localized, and inside the kinetochore corona, where CENP-E is localized during prometaphase. It is thought that this protein can bind to itself, as well as to CENP-A, CENP-B or CENP-C. Multimers of the protein localize constitutively to the inner kinetochore plate and play an important role in the organization and function of the active centromere-kinetochore complex. [provided by RefSeq, Jul 2008]

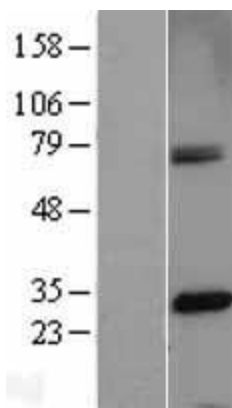
Product images:



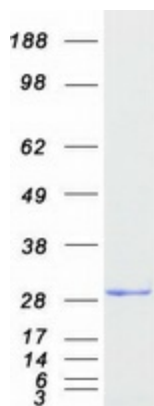
Circular map for RC204531



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CENPH (Cat# RC204531, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CENPH(Cat# [TA503872]). Positive lysates [LY402956] (100ug) and [LC402956] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402956]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204531 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CENPH protein (Cat# [TP304531]). The protein was produced from HEK293T cells transfected with CENPH cDNA clone (Cat# RC204531) using MegaTran 2.0 (Cat# [TT210002]).