

Product datasheet for **RC236436**

Centrin 3 (CETN3) (NM_001297765) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Centrin 3 (CETN3) (NM_001297765) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CETN3
Synonyms: CDC31; CEN3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC236436 representing NM_001297765
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAGTTAGCTCTGAGAAGTGAGCTTGTAGTGGACAAAACAAAGAGGAAAAAAGAAGAGAAGTGTCTG
AGGAACAGAAACAAGAAATTAAGATGCTTTTGAACATTTGATACAGACAAAGATGAAGCAATAGATTA
TCATGAATTAAGGTGGCAATGAGAGCCTTGGGGTTTGTATGTAAGAAAGCTGATGACTGAAGATTCTT
AAAGATTATGACAGAGAAGCCACAGGAAAATCACCTTTGAAGATTTAATGAAGTTGTGACAGACTGGA
TATTGAAAGAGATCCCATGAAGAAATACTCAAGGCATTTAAACTATTTGATGATGATGATTCAGGTAA
AATAAGCTTGAGGAATTTGCGACGTGTTGCTAGAGAATGGGTGAAAACATGAGTGATGAAGAACTCGA
GCTATGATAGAAGATTTGACAAAGATGGTGATGGAGAAATCTTAAGAACATACTCTTGCTTCCTATTT
GGTCTAGATGCCTCAGTCTAAATCGGGAGTTCTCAGTGAAGTAAACCAAGAGGAGTTTCATTGCTATTAT
GACTGGTGACATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236436 representing NM_001297765
Red=Cloning site Green=Tags(s)

MSLALRSELVVDKTKRKRRELSEEQKQEIKDAFELFDTDKDEAIDYHELKVMRALGFDVKKADVLIKIL
KDYDREATGKITFEDFNVVTDWILERDPHEEILKAFKLFDDDDSGKISLRNLRRVARELGENMSDEELR
AMIEEFDKDGDGEILKNILLPIWSRCLSLNREFFSEVNQEEFIAIMTGD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

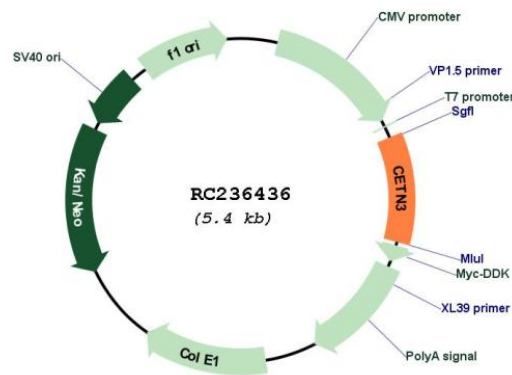
Restriction Sites: SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_001297765

ORF Size: 573 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.

RefSeq: [NM_001297765.1](#), [NP_001284694.1](#)

RefSeq Size: 1446 bp

RefSeq ORF: 576 bp

Locus ID: 1070

Cytogenetics: 5q14.3

Protein Families: Druggable Genome

MW: 22.9 kDa

Gene Summary: The protein encoded by this gene contains four EF-hand calcium binding domains, and is a member of the centrin protein family. Centrins are evolutionarily conserved proteins similar to the CDC31 protein of *S. cerevisiae*. Yeast CDC31 is located at the centrosome of interphase and mitotic cells, where it plays a fundamental role in centrosome duplication and separation. Multiple forms of the proteins similar to the yeast centrin have been identified in human and other mammalian cells, some of which have been shown to be associated with centrosome fractions. This protein appears to be one of the most abundant centrins associated with centrosome, which suggests a similar function to its yeast counterpart. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]